



1983 BRISTOL BAY SALMON (Oncorhynchus sp.) - A COMPILATION OF  
CATCH, ESCAPEMENT, AND BIOLOGICAL DATA

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and

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January 1987

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## ABSTRACT

Numbers of Bristol Bay Pacific salmon (*Oncorhynchus* sp.) that were either caught in the commercial harvest or counted as escapement in the rivers during 1983 are summarized. Sex and age composition, mean lengths and weights, standard errors and sample sizes, plus catches allocated to river of origin are presented in tabular form. Emergency order periods plus related catches and brood year tables are also presented.

KEY WORDS: Bristol Bay, salmon (*Oncorhynchus* sp.), biological sampling, catch, escapement.

## INTRODUCTION

This report summarizes the 1983 commercial catch and escapement statistics for the Bristol Bay sockeye (*Oncorhynchus nerka*), chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), and coho salmon (*O. kisutch*). There were no pink salmon (*O. gorbuscha*) samples for this year.

## METHODS AND MATERIALS

Personnel from the Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries, collected the data and aged the scales from both the catch and escapement. Much of the data used in this report were collected by tower crews at escapement counting towers and catch samplers at selected canneries throughout Bristol Bay. Figure 1 shows the approximate location of these projects.

Salmon escapement enumeration crews collected sex and length data as well as scale samples for age determination with beach seines. On the Branch River where there was no counting tower, otolith samples for age determination were collected on the spawning grounds (Bill 1984). On the Branch River, the sockeye salmon sex composition was assumed to be 50% males.

Commercial catch samplers collected sex, length, and weight data as well as scale samples whenever the various districts were open to commercial fishing. Samplers obtained fish as they were unloaded from tenders and tried to spread their samples as uniformly as possible among the delivering tenders.

Sample sizes for both catch and escapement were based on statistical analysis of past sampling efforts which indicated that for sockeye and chinook salmon a 600-fish sample per sample period and for chum salmon a 400-fish sample per sample period was required for the estimation of age and sex composition.

Sockeye escapements were counted from towers constructed on the banks of the Kvichak, Naknek, Egegik, Ugashik, Wood, Igushik, Nuyakuk, and Togiak Rivers. Salmon were counted for 10 minutes on each bank of the river every hour. These 10 minute counts were then expanded to estimate hourly escapements which were accumulated to determine the daily escapement. Sockeye escapements in the Branch, Snake, Nushagak, and Mulchatna Rivers plus several Togiak District systems as well as chinook and chum salmon escapements in the Nushagak and Togiak Districts were estimated through aerial surveys.

Final Bristol Bay harvest data were compiled from fish tickets by the Computer Services Section of the Division of Commercial Fisheries. Japanese mothership commercial catch of maturing and immature sockeye salmon of Bristol Bay origin were provided by Mike Dahlberg of the National Marine Fisheries Service, Auke Bay Laboratory, Auke Bay, Alaska 99821. Because most of the fish caught on the high seas have spent at least two years at sea, the immatures were allocated to the following year's three (i.e., 4<sub>1</sub>, 5<sub>2</sub>, 6<sub>3</sub>, and 7<sub>4</sub>) and four-ocean age groups (i.e., 5<sub>1</sub>, 6<sub>2</sub>, 7<sub>3</sub>, and 8<sub>4</sub>). Similarly, the matures were allocated to the same year of catch two (i.e., 3<sub>1</sub>, 4<sub>2</sub>, 5<sub>3</sub>, and 6<sub>4</sub>), three-, and four-ocean age groups. There were no allocation to the one

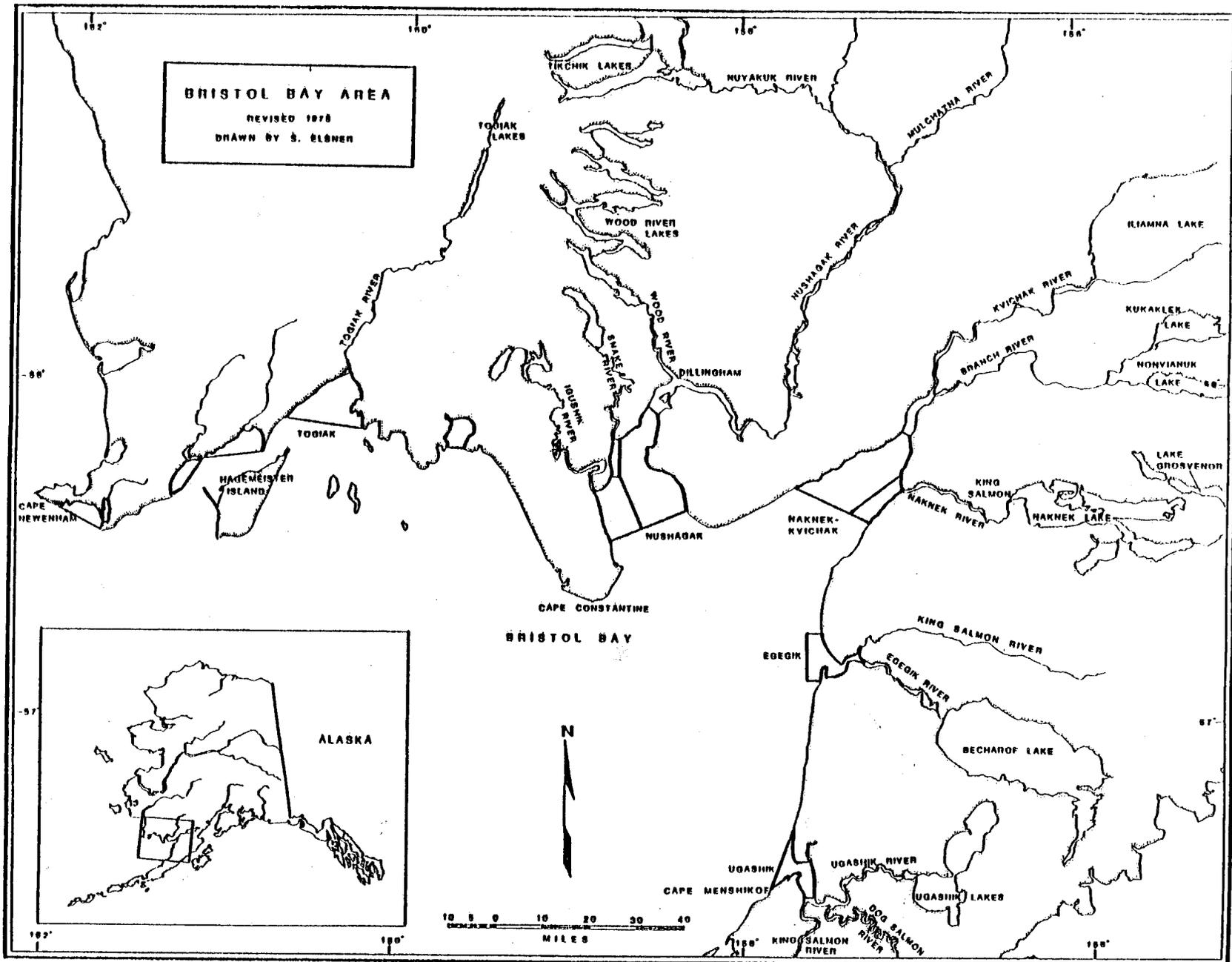


Figure 1. Bristol Bay major river systems and commercial fishing districts.

ocean age groups (i.e., 3<sub>2</sub>, 4<sub>3</sub>, and 5<sub>4</sub>). Age composition of the South Peninsula June sockeye fishery were provided by Doug Eggers of the Stock Biology Group of the Division of Commercial Fisheries. There were data available for 1969 through 1971, 1974, and from 1978 through 1983. For the years where the age composition of the South Peninsula catch were not available, the age composition of the total Bristol Bay returns were used instead. Mac Minard of the Division of Sport Fish summarized the Nushagak and Togiak chinook brood year statistics.

Sockeye caught in the Naknek-Kvichak and Nushagak Districts were from mixed river stocks and therefore had to be allocated to the various contributing river systems to determine each river's total return. Catches of each age class were apportioned separately using the ratio of escapements of that age class in the contributing rivers.

If an age class appeared in the catch but not the escapement, then it was allocated either 1) entirely to the river(s) which had returns from the same brood line and fresh water age group either the preceding or following year or 2) when that was not possible, to all the rivers in that district by using the ratio of total escapements. If there were any rounding errors in an age class, the adjustment was made in the largest allocation.

The two digit age designation used in this report is the Gilbert/Rich method of representing salmon ages or a derivative thereof. The first digit represents the total age of the fish while the second digit represents the number of years of fresh water residence. Thus a 5<sub>3</sub> fish (5 subscript 3 in the text or 5(3) in the tables) is 5 years old, migrated to the ocean after spending 1 year in the stream, 2 years in the lake, and 2 years in the ocean. Similarly, a 5<sub>2</sub> fish is one that is 5 years old and spent 1 year in the stream, 1 year in the lake, and 3 years in the ocean.

Length measurements were from mid-eye to fork of tail and weights were round weights.

## RESULTS

Catch of all species to Bristol Bay exceeded 39 million fish. The salmon fishing season began in late May and ended in early September.

Weekly fishing periods in Bristol Bay were from 9:00 am Monday until 9:00 am Saturday in all fishing districts except Togiak where it ended at 9:00 am on Fridays unless modified by emergency order (Table 1).

### Sockeye Salmon

The sockeye salmon return, i.e., catch plus escapement, was over 45 million fish (Table 2). The majority of the run, 82%, were 2-ocean fish (Table 3). Most of the 2-ocean fish were in the 4<sub>2</sub> group from the 1979 escapement with the remainder in the 5<sub>3</sub> age group from the 1978 escapement (Tables 4 and 5). The 1978 and 1979 escapements also produced some 3-ocean fish in the 5<sub>2</sub> and 6<sub>3</sub> age group which were 14% and 3% of the 1983 run, respectively.

Table 1. Bristol Bay emergency order fishing periods by district, 1983.

<u>Emergency Orders<sup>1/</sup></u> Number		Date and Time		Hours/Days Open
<u>NAKNEK-KVICHAK DISTRICT</u>				
AKN 02	June 27	11:00 p.m. to June 28	11:00 a.m.	12 hrs.
AKN 04	June 29	2:00 p.m. to June 30	2:00 a.m.	12 hrs.
AKN 07	June 30	2:00 a.m. to June 30	2:00 p.m.	12 hrs.
AKN 09	June 30	2:00 p.m. to July 1	2:00 p.m.	24 hrs.
AKN 12	July 1	2:00 p.m. to July 17	9:00 a.m.	15 days, 19 hrs.
AKN 16	July 6	5:00 p.m. to July 7	7:00 a.m.	14 hrs. <sup>2/</sup>
<u>Naknek Section Only</u>				
AKN 18	July 9	7:00 p.m. to July 10	11:00 p.m.	28 hrs. <sup>2/</sup>
AKN 20	July 10	11:00 p.m. to July 11	11:00 p.m.	24 hrs. <sup>2/</sup>
<u>EGEGIK DISTRICT</u>				
AKN 01	June 26	10:00 p.m. to June 27	12:00 N	14 hrs.
AKN 03	June 28	12:00 N to June 28	12:00 MN	12 hrs.
AKN 05	June 28	12:00 MN to June 29	12:00 MN	24 hrs.
AKN 08	June 29	12:00 MN to July 1	1:00 a.m.	25 hrs.
AKN 11	July 1	1:00 a.m. to July 2	1:00 a.m.	24 hrs.
AKN 13	July 1	6:00 p.m. to July 17	9:00 a.m.	15 days, 15 hrs.
<u>UGASHIK DISTRICT</u>				
AKN 01	June 26	10:00 p.m. to June 27	12:00 N	14 hrs.
AKN 06	June 29	1:00 p.m. to June 30	2:00 p.m.	25 hrs.
AKN 10	June 30	2:00 p.m. to July 1	2:00 p.m.	24 hrs.
AKN 14	July 3	3:00 p.m. to July 4	4:00 p.m.	25 hrs.
AKN 15	July 4	4:00 p.m. to July 5	5:00 p.m.	25 hrs.
AKN 17	July 7	6:00 p.m. to July 8	7:00 p.m.	25 hrs.
AKN 19	July 9	8:00 p.m. to July 10	9:00 p.m.	25 hrs.
AKN 21	July 10	9:00 p.m. to July 11	10:00 p.m.	25 hrs.
AKN 22	July 11	10:00 p.m. to July 12	11:00 p.m.	25 hrs.
AKN 23	July 12	11:00 p.m. to July 13	12:00 MN	25 hrs.
AKN 24	July 13	12:00 MN to July 17	9:00 a.m.	4 days, 9 hrs.
AKN 25	July 17	9:00 a.m. to July 18	9:00 a.m.	24 hrs.
<u>NUSHAGAK DISTRICT</u>				
DLG 01	June 15	9:00 a.m. to June 16	9:00 a.m.	24 hrs. <sup>2/</sup>
DLG 04	June 28	3:00 a.m. to June 28	3:00 p.m.	12 hrs.
DLG 05	July 3	6:00 a.m. to July 3	6:00 p.m.	12 hrs.
DLG 06	July 3	6:00 p.m. to July 4	9:00 a.m.	15 hrs.
DLG 07	July 4	9:00 a.m. to July 5	9:00 a.m.	24 hrs.
DLG 08	July 5	9:00 a.m. to July 18	9:00 a.m.	13 days
<u>Nushagak Section Only</u>				
DLG 03	June 26	12:01 a.m. to June 26	12:00 N	12 hrs.
<u>Igushik Section Only</u>				
DLG 02	June 23	10:00 a.m. to June 23	10:00 p.m.	12 hrs.
DLG 03	June 25	12:00 N to June 26	12:00 N	24 hrs.
<u>TOGIAK DISTRICT</u>				
DLG 09	July 15	9:00 a.m. to July 18	9:00 a.m.	3 days
DLG 10	July 22	9:00 a.m. to July 25	9:00 a.m.	3 days
DLG 11	Sept. 5	9:00 a.m. to Sept. 30	12:00 MN	25 days, 15 hrs. <sup>2/</sup>

<sup>1/</sup> Prefix code on emergency orders and Commissioner's announcements and general announcements indicate office where announcement originated ("AKN" for King Salmon and "DLG" for Dillingham).

<sup>2/</sup> Closed to fishing.

Table 2. Bristol Bay sockeye salmon inshore return by river system, 1983.

SYSTEM	CATCH	ESCAPEMENT	TOTAL RETURN
KVICHAK RIVER	16,534,901	3,569,982	20,104,883
BRANCH RIVER	461,075	96,220	557,295
NAKNEK RIVER	4,563,396	888,294	5,451,690
SUB-TOTAL NAKNEK-KVICHAK DISTRICT	21,559,372	4,554,496	26,113,868
EGEGIK RIVER	6,755,256	792,282	7,547,538
UGASHIK RIVER	3,349,451	1,000,614	4,350,065
WOOD RIVER	3,026,678	1,360,968	4,387,646
IGUSHIK RIVER	692,355	180,438	872,793
NUYAKUK RIVER	1,400,711	318,606	1,719,317
SUB-TOTAL NUSHAGAK-IGUSHIK DISTRICT	5,119,744	1,860,012	6,979,756
TOGIK RIVER	588,208	191,520	779,728
GRAND TOTAL	37,372,031	8,398,924	45,770,955

Note: Igushik River inshore return includes 171,258  
Igushik beach setnet commercial catch.

Table 3. Bristol Bay sockeye salmon inshore return by ocean age group and river system, 1983.

SYSTEM	OCEAN AGE GROUP				TOTAL
	1	2	3	4	
<b>KVICHAK RIVER</b>					
NUMBER	75,178	18,845,978	1,183,727	0	20,104,883
PERCENT	.16	41.17	2.59	.00	43.92
<b>BRANCH RIVER</b>					
NUMBER	2,003	477,518	74,301	3,473	557,295
PERCENT	.00	1.04	.16	.01	1.22
<b>NAKNEK RIVER</b>					
NUMBER	5,315	3,397,255	1,962,583	86,537	5,451,690
PERCENT	.01	7.42	4.29	.19	11.91
<b>SUB-TOTAL NAKNEK-KVICHAK DISTRICT</b>					
NUMBER	82,496	22,720,751	3,220,611	90,010	26,113,868
PERCENT	.18	49.64	7.04	.20	57.05
<b>EGEGIK RIVER</b>					
NUMBER	10,339	6,452,771	1,071,111	13,317	7,547,538
PERCENT	.02	14.10	2.34	.03	16.49
<b>UGASHIK RIVER</b>					
NUMBER	8,263	3,772,146	560,071	9,585	4,350,065
PERCENT	.02	8.24	1.22	.02	9.50
<b>WOOD RIVER</b>					
NUMBER	1,631	3,260,447	1,125,568	0	4,387,646
PERCENT	.00	7.12	2.46	.00	9.59
<b>IGUSHIK RIVER</b>					
NUMBER	111	495,821	367,491	9,370	872,793
PERCENT	.00	1.08	.80	.02	1.91
<b>NUYAKUK RIVER</b>					
NUMBER	196	412,305	1,125,583	181,233	1,719,317
PERCENT	.00	.90	2.46	.40	3.76
<b>SUB-TOTAL NUSHAGAK-IGUSHIK DISTRICT</b>					
NUMBER	1,938	4,168,573	2,618,642	190,603	6,979,756
PERCENT	.00	9.11	5.72	.42	15.25
<b>TOGIAK RIVER</b>					
NUMBER	0	334,158	442,014	3,556	779,728
PERCENT	.00	.73	.97	.01	1.70
<b>GRAND TOTAL</b>					
NUMBER	103,036	37,448,399	7,912,449	307,071	45,770,955
PERCENT	.23	81.82	17.29	.67	100.00

Note: Igushik River inshore return includes 171,258 Igushik beach setnet commercial catch.

Table 4. Bristol Bay sockeye salmon inshore return by age group and river system, 1983.

RIVER SYSTEM	AGE GROUP													TOTAL
	31	32	41	42	43	51	52	53	62	63	64	73	74	
KVICHAK RIVER	0	2325	2985	17604589	72853	0	1091586	1241389	0	89156	0	0	0	20104883
BRANCH RIVER	0	0	2176	440374	2003	0	64143	37144	3473	7982	0	0	0	557295
NAKNEK RIVER	0	1398	743	2341519	3917	0	1599282	1055736	61542	361160	0	24995	1398	5451690
SUB-TOTAL NAKNEK-KVICHAK DISTRICT	0	3723	5904	20386482	78773	0	2755011	2334269	65015	458298	0	24995	1398	26113868
----- EGEGIK RIVER	0	1086	0	683705	9253	0	481308	5717497	13317	589803	51569	0	0	7547538
----- UGASHIK RIVER	0	587	0	2953484	7676	0	389598	812401	9585	167343	6261	0	3130	4350065
----- WOOD RIVER	2034	839	0	2459565	792	0	1097083	798848	0	28485	0	0	0	4387646
IGUSHIK RIVER	270	111	3711	433200	0	0	358396	62351	9190	5384	0	180	0	872793
NUYAKUK RIVER	476	196	0	404329	0	0	1103045	7500	181233	22538	0	0	0	1719317
SUB-TOTAL NUSHAGAK-IGUSHIK DISTRICT	2780	1146	3711	3297094	792	0	2558524	868699	190423	56407	0	180	0	6979756
----- TOGIK RIVER	0	0	860	266320	0	235	429414	67838	3321	11740	0	0	0	779728
----- GRAND TOTAL	2780	6542	10475	27587085	96494	235	6613855	9800704	281661	1283591	57830	25175	4528	45770955

Note: Igushik River inshore return includes 171,258 Igushik beach setnet commercial catch.

Table 5. Bristol Bay sockeye salmon inshore return (percent) by age group and river system, 1983.

RIVER SYSTEM	AGE GROUP													TOTAL
	31	32	41	42	43	51	52	53	62	63	64	73	74	
KVICHAK RIVER	.00	.01	.01	87.56	.36	.00	5.43	6.17	.00	.44	.00	.00	.00	43.92
BRANCH RIVER	.00	.00	.39	79.02	.36	.00	11.51	6.67	.62	1.43	.00	.00	.00	1.22
NAKNEK RIVER	.00	.03	.01	42.95	.07	.00	29.34	19.37	1.13	6.62	.00	.46	.03	11.91
NAKNEK-KVICHAK DISTRICT	.00	.01	.02	78.07	.30	.00	10.55	8.94	.25	1.75	.00	.10	.01	57.05
-----														
EGEGIK RIVER	.00	.01	.00	9.06	.12	.00	6.38	75.75	.18	7.81	.68	.00	.00	16.49
-----														
UGASHIK RIVER	.00	.01	.00	67.90	.18	.00	8.96	18.68	.22	3.85	.14	.00	.07	9.50
-----														
WOOD RIVER	.05	.02	.00	56.06	.02	.00	25.00	18.21	.00	.65	.00	.00	.00	9.59
IGUSHIK RIVER	.03	.01	.43	49.63	.00	.00	41.06	7.14	1.05	.62	.00	.02	.00	1.91
NUYAKUK RIVER	.03	.01	.00	23.52	.00	.00	64.16	.44	10.54	1.31	.00	.00	.00	3.76
NUSHACAK-IGUSHIK DISTRICT	.04	.02	.05	47.24	.01	.00	36.66	12.45	2.73	.81	.00	.00	.00	15.25
-----														
TOGIAK RIVER	.00	.00	.11	34.16	.00	.03	55.07	8.70	.43	1.51	.00	.00	.00	1.70
-----														
GRAND TOTAL	.01	.01	.02	60.27	.21	.00	14.45	21.41	.62	2.80	.13	.06	.01	100.00

Note: Igushik River inshore return includes 171,258 Igushik beach setnet commercial catch.

The average sockeye salmon length was estimated to be 529.7 mm and the average weight was estimated to be 2.6 kg (Table 6). There were slightly more females (53%) than males (47%) in the total run.

Not included in these tables are the Japanese high seas mothership fishery harvest of Bristol Bay sockeye salmon. The renegotiation of the International North Pacific Fisheries Commission treaty, which first went into effect for the 1978 fishing season, continues to restrict by area and time the movements and fishing patterns of the Japanese land based and mothership fleet. This curtailment has markedly reduced high seas interceptions of Bristol Bay sockeye salmon. In 1983 the Japanese high seas mothership fleet caught only 63,000 mature sockeye salmon of Bristol Bay origin. The catch of immature Bristol Bay sockeye salmon in the spring of 1982 was only 380,000. Altogether, the 1982 immature and 1983 mature fish intercepted on the high seas was only 443,000 fish or less than 2% of the total 1983 Bay sockeye salmon run. This level of interception is well below earlier levels when interceptions of several million salmon were common (Appendix Table 1). Nevertheless, sockeye salmon of Bristol Bay origin are still intercepted by the South Alaska Peninsula fishery. Their catches in 1983 were 1,961,000 (Appendix Table 2).

#### Chinook Salmon

More than 88% of the 199,000 chinook salmon harvested in Bristol Bay were caught in the Nushagak and Togiak Districts. Catch samples were collected in all but the Egegik and Ugashik Districts. The escapement in the Nushagak District was the largest since 1966. Chinook escapement estimates for all five districts were available this year.

#### Chum Salmon

The 1.6 million harvest was the largest since record keeping began in 1884. Catch and escapement samples were collected in the Nushagak and Togiak Districts where over 44% of the harvest occurred. Escapements were estimated at 164,000 and 165,000 spawners in the Nushagak and Togiak Districts, respectively.

#### Pink Salmon

Pink salmon runs in Bristol Bay during odd-numbered years tend to be very small. The 1983 harvest of pink salmon was no exception when less than 500 pink salmon were harvested. No pink salmon samples were collected this year.

#### Coho Salmon

The 1983 coho salmon harvest of 128,000 was slightly greater than the recent 20-year average of 120,000. Catch samples were available only from the Egegik District although the Egegik harvest represented about 20% of the Bristol Bay coho harvest. Most of the coho catch, about 63%, was from the Nushagak District.

Table 6. Bristol Bay sockeye salmon catch and escapement sex, age, length (mm), and weight (kg), 1983.

	AGE GROUP														TOTAL
	31	32	41	42	43	51	52	53	62	63	64	73	74		
MALE	2,780	5,202	5,271	12,457,251	73,817	235	3,121,330	4,952,067	118,878	608,848	30,835	11,155	699	21,388,368	
PERCENT	.01	.01	.01	27.22	.16	.00	6.82	10.82	.26	1.33	.07	.02	.00	46.73	
AV LENGTH	470.00	374.73	289.16	526.31	363.65	589.00	571.92	541.52	609.86	586.35	544.39	614.13	594.00	538.07	
STD ERROR	.00	.00	.00	1.52	.00	.00	2.04	2.20	22.07	14.86	.00	.00	.00	.04	
SAMP SIZE	1	7	6	5,707	71	1	2,832	2,418	83	310	11	5	1	11,453	
AV WEIGHT	.00	.00	2.94	2.58	.00	.00	3.42	2.71	4.21	3.24	2.97	.00	.00	2.76	
STD ERROR	.00	.00	.00	.06	.00	.00	.07	.08	.00	.64	.00	.00	.00	.00	
SAMP SIZE	0	0	1	487	0	0	351	209	9	32	3	0	0	1,092	
FEMALE	0	1,340	5,204	15,129,834	22,677	0	3,492,525	4,848,637	162,783	674,743	26,995	14,020	3,829	24,382,587	
PERCENT	.00	.00	.01	33.06	.05	.00	7.63	10.59	.36	1.47	.06	.03	.01	53.27	
AV LENGTH	.00	540.45	539.74	511.01	429.51	.00	554.80	525.59	579.67	572.19	531.65	570.39	584.23	522.34	
STD ERROR	.00	.00	.00	1.11	.00	.00	1.79	2.34	13.69	10.08	.00	.00	.00	.03	
SAMP SIZE	0	2	4	7,351	12	0	3,578	2,660	106	369	11	3	2	14,098	
AV WEIGHT	.00	.00	2.67	2.22	.00	.00	2.81	2.35	3.38	3.08	.00	.00	.00	2.36	
STD ERROR	.00	.00	.00	.04	.00	.00	.07	.05	.00	.20	.00	.00	.00	.00	
SAMP SIZE	0	0	1	534	0	0	440	195	22	30	0	0	0	1,222	
BOTH SEX	2,780	6,542	10,475	27,587,085	96,494	235	6,613,855	9,800,704	281,661	1,283,591	57,830	25,175	4,528	45,770,955	
PERCENT	.01	.01	.02	60.27	.21	.00	14.45	21.41	.62	2.80	.13	.06	.01	100.00	
AV LENGTH	470.00	408.67	413.65	517.92	379.13	589.00	562.88	533.64	592.41	578.91	538.44	589.77	585.74	529.69	
STD ERROR	.00	.00	.00	.91	.00	.00	1.38	1.61	12.98	8.44	.00	.00	.00	.03	
SAMP SIZE	1	9	10	13,058	83	1	6,410	5,078	189	679	22	8	3	25,551	
AV WEIGHT	.00	.00	2.70	2.38	.00	.00	3.10	2.54	3.77	3.16	2.97	.00	.00	2.55	
STD ERROR	.00	.00	.00	.03	.00	.00	.05	.05	.00	.23	.00	.00	.00	.00	
SAMP SIZE	0	0	2	1,021	0	0	791	404	31	62	3	0	0	2,314	

#### Naknek-Kvichak District:

Over 98% of the 21.9 million Naknek-Kvichak District commercial salmon catch were sockeye salmon (Table 7). There are three rivers draining into the Naknek-Kvichak District and this district's sockeye salmon inshore return, i.e., catch plus the escapement from the three rivers, added up to 26.1 million (Table 8). Sex, age, weight, and length data on the sockeye salmon catch are presented in Table 9. Because there are three rivers draining into the Naknek-Kvichak District, the district sockeye salmon catch was apportioned to each of the rivers to determine a total return by river. The Kvichak River apportioned catch of salmon was 16.5 million. Adding an escapement of 3.6 million to this apportioned catch lead to a Kvichak River total return of 20.1 million sockeye salmon (Table 10). Daily escapement counts and the sex, age, and length statistics of the sockeye salmon escapement are presented in Tables 11 and 12, respectively.

The Branch River total return of sockeye salmon was 557,000 from an apportioned catch of 461,000 and an escapement of 96,000 (Table 13). The Naknek River total run of sockeye salmon was 5.4 million from an apportioned catch of 4.6 million and an escapement of .8 million (Table 14). The Naknek River daily escapement counts and the sex, age, and length statistics of the escapement are presented in Tables 15 and 16, respectively.

Most of the remaining harvest, 2%, were chum salmon. Less than 1% of the catch were chinook salmon. The age, sex, and size statistics of the chinook salmon catch in this district as well as escapement in the Branch and Naknek Rivers are presented in Tables 17, 18, and 19, respectively.

#### Egegik District:

The Egegik District had a commercial salmon harvest of over 6.9 million fish of which 98% were sockeye salmon (Table 20). Total return of sockeye salmon catch plus escapement in this district was 7.5 million fish (Table 21). Sex, age, weight, and length data on the sockeye catch are presented in Tables 22. The Egegik River daily escapement counts and the sex, age, and length statistics of the escapement are presented in Tables 23 and 24, respectively.

Chum salmon catches represented most of the remaining 2% of the total district harvest. Chinook and coho salmon catches together were about .5%. Age, sex, and size statistics of the Egegik chinook escapement and coho catch are presented in Tables 25 and 26, respectively.

#### Ugashik District:

The total commercial salmon catch in the Ugashik District was over 3.4 million fish with 96% of it being sockeye salmon (Table 27). Total sockeye return of catch plus escapement was 4.4 million (Table 28). Sex, age, weight, and length data on the sockeye salmon catch are presented in Table 29. The Ugashik River daily escapement counts and the age, sex, and length statistics are presented in Tables 30 and 31, respectively.

Chum and chinook salmon catches were 3 and .3% of the total district catch, respectively. Age, sex, and size statistics of the chinook salmon catch and escapement from this district are presented in Tables 32 and 33.

Table 7. Naknek-Kvichak District commercial salmon catch by species and fishing effort by gear type, 1983.

period	hours	drift	set	Sockeye	Chinook	Chum	Pink	Coho	Total
June	3	24	1		1				1
	7	24	1		1				1
	8	24	2	1	4				5
	9	24	1	1	20				21
	10	24	2	96	13				109
	13	15	1	142	1	8			151
	14	24	1	234	8	11			253
	15	24	13	579	40	25			644
	16	24	32	2,457	103	153			2,713
	17	24	68	7,632	411	439			8,482
	18	15	32	4,136	121	221			4,478
	20	15	337 344	54,964	545	1,360			56,869
	21	24	411	114,356	557	5,964			120,877
	22	24	430	88,311	177	1,008			89,496
	23	9	426	169,791	140	2,502			172,433
	27	12	744	1,846,167	214	19,820			1,866,201
	29	10	391	903,025	229	4,556			907,810
	30	24	762 344	2,184,881	631	11,919			2,197,431
July	1	24	757	1,077,828	354	6,624			1,084,806
	2	24	764	1,725,817	450	13,414			1,739,681
	3	24	795 344	1,773,971	355	13,798			1,788,124
	4	24	770	1,243,990	321	9,707			1,254,018
	5	24	716	1,518,442	351	8,481			1,527,274
	6	17	743	1,470,864	356	13,208			1,484,428
	7	17	578 344	786,119	176	6,246			792,541
	8	24	684	908,204	303	9,373			917,880
	9	24	624	850,151	313	10,684	5		861,153
	10	24	553 344	1,001,051	223	16,891			1,018,165
	11	24	652	960,777	288	16,685			977,750
	12	24	616 344	664,841	350	12,424			677,615
	13	24	561	939,055	273	23,281			962,609
	14	24	599	452,721	204	15,067	15		468,007
	15	24	386	57,256	110	4,467			61,833
	16	33	121	205,900	159	14,860			220,919
	18	15	295	238,885	137	17,104			256,126
	19	24	303	150,665	139	15,576	1		166,381
	20	24	181	54,571	130	11,427	3		66,131
	21	24	146	46,131	279	17,186	11	2	63,609
	22	24	123	22,227	191	11,726	11		34,155
	23	9	25	5,327	67	2,447	3	5	7,849
	25	15	92	10,313	72	14,534		2	24,921
	26	24	62	11,490	110	14,956	2	25	26,583
	27	24	20	4,152	18	3,012			7,182
	28	24	7	1,178	4	592			1,774
	29	24		27		13			40
August	2	24	1	646	6			4	656
	3	24						2,232	2,232
	5	24						1,538	1,538
	6	9						1,902	1,902
	8	15						489	489
	15	24						986	986
	30	24						40	40
	31	24						10	10
September	2	24						12	12
	6	24						25	25
	7	24						10	10
total				21,559,372	8,955	351,769	51	7,282	21,927,429
percent of district catch				98.3	0.0	1.6	0.0	0.0	

Note: Naknek section closed between 1900 h, 9 July to 1100 h, 11 July.

Table 8. Naknek-Kvichak District inshore return of sockeye salmon by age group and sex, 1983.

	AGE GROUP										TOTAL
	32	41	42	43	52	53	62	63	73	74	
<b>MALES</b>											
CATCH	0	0	702,998	0	1,219,451	989,018	3,808	198,936	9,128	0	10,123,339
ESCAPEMENT	3,723	2,096	435,087	68,338	199,392	175,866	10,215	30,731	1,847	699	1,927,994
TOTAL	3,723	2,096	138,085	68,338	1,418,843	1,164,884	14,023	229,667	10,975	699	12,051,333
PERCENT	.03	.02	75.83	.57	11.77	9.67	.12	1.91	.09	.01	100.00
<b>FEMALES</b>											
CATCH	0	3,808	107,557	9,128	1,136,846	943,772	41,712	180,310	12,900	0	11,436,033
ESCAPEMENT	0	0	140,840	1,307	199,322	225,613	9,280	48,321	1,120	699	2,626,502
TOTAL	0	3,808	248,397	10,435	1,336,168	1,169,385	50,992	228,631	14,020	699	14,062,535
PERCENT	.00	.03	79.99	.07	9.50	8.32	.36	1.63	.10	.00	100.00
<b>SEXES COMBINED</b>											
CATCH	0	3,808	810,555	9,128	2,356,297	1,932,790	45,520	379,246	22,028	0	21,559,372
ESCAPEMENT	3,723	2,096	575,927	69,645	398,714	401,479	19,495	79,052	2,967	1,398	4,554,496
TOTAL	3,723	5,904	386,482	78,773	2,755,011	2,334,269	65,015	458,298	24,995	1,398	26,113,868
PERCENT	.01	.02	78.07	.30	10.55	8.94	.25	1.75	.10	.01	100.00

Table 9. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983.

	SAMPLE PERIOD 1 6/19- 6/28		AGE GROUP						TOTAL
	41	42	43	52	53	62	63	73	
MALE	0	917,833	0	144,720	87,594	3,808	26,659	0	1,180,614
PERCENT		40.10		6.32	3.83	.17	1.16		51.58
AV LENGTH		530.69		570.11	547.57	594.00	575.86		538.00
STD ERROR		1.47		5.12	4.78		13.67		1.39
SAMP SIZE	0	241	0	38	23	1	7	0	310
AV WEIGHT		2.58		3.33	2.65	3.71	3.37		2.72
STD ERROR		.03		.12	.13		.36		.03
SAMP SIZE	0	131	0	22	11	1	6	0	171
FEMALE	3,808	799,771	0	182,805	87,594	3,808	30,467	0	1,108,253
PERCENT	.17	34.94		7.99	3.83	.17	1.33		48.42
AV LENGTH	545.00	524.01		553.90	532.74	585.00	567.00		531.09
STD ERROR		1.41		4.62	3.70		8.28		1.34
SAMP SIZE	1	210	0	48	23	1	8	0	291
AV WEIGHT	2.67	2.37		2.73	2.47		2.79		2.45
STD ERROR		.03		.09	.07		.17		.03
SAMP SIZE	1	113	0	28	16	0	4	0	162
BOTH SEX	3,808	717,604	0	327,525	175,188	7,616	57,126	0	2,288,867
PERCENT	.17	75.04		14.31	7.65	.33	2.50		100.00
AV LENGTH	545.00	527.58		561.06	540.16	589.50	571.13		534.66
STD ERROR		1.03		3.43	3.02		7.76		.97
SAMP SIZE	1	451	0	86	46	2	15	0	601
AV WEIGHT	2.67	2.48		2.99	2.54	3.71	3.14		2.59
STD ERROR		.02		.07	.07		.23		.02
SAMP SIZE	1	244	0	50	27	1	10	0	333

-Continued-

Table 9. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 2 6/29- 7/ 2		AGE GROUP							TOTAL
	41	42	43	52	53	62	63	73		
MALE	0	177,770	0	420,825	231,454	0	84,165	0	2,914,214	
PERCENT		36.96		7.14	3.93		1.43		49.46	
AV LENGTH		526.52		544.18	531.50		561.88		530.49	
STD ERROR		1.72		5.37	6.92		16.07		1.67	
SAMP SIZE	0	207	0	40	22	0	8	0	277	
AV WEIGHT		2.42		3.38	2.63		2.85		2.56	
STD ERROR		.09		.71	.14				.10	
SAMP SIZE	0	15	0	2	3	0	1	0	21	
FEMALE	0	272,455	0	357,701	284,057	10,521	52,603	0	2,977,337	
PERCENT		38.57		6.07	4.82	.18	.89		50.54	
AV LENGTH		514.76		541.44	527.33	552.00	544.80		519.83	
STD ERROR		1.51		4.13	3.01		19.10		1.34	
SAMP SIZE	0	216	0	34	27	1	5	0	283	
AV WEIGHT		2.24		2.72	2.38				2.36	
STD ERROR		.06		.09	.05				.04	
SAMP SIZE	0	20	0	6	6	0	0	0	32	
BOTH SEX	0	450,225	0	778,526	515,511	10,521	136,768	0	5,891,551	
PERCENT		75.54		13.21	8.75	.18	2.32		100.00	
AV LENGTH		520.51		542.92	529.20	552.00	555.31		525.10	
STD ERROR		1.14		3.47	3.52		12.32		1.07	
SAMP SIZE	0	423	0	74	49	1	13	0	560	
AV WEIGHT		2.32		2.89	2.46		2.85		2.44	
STD ERROR		.05		.19	.06				.05	
SAMP SIZE	0	35	0	8	9	0	1	0	53	

-Continued-

Table 9. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 3 7/ 3- 7/ 8		AGE GROUP							TOTAL
	41	42	43	52	53	62	63	73		
MALE	0	489,793	0	425,716	387,015	0	51,602	0	3,354,126	
PERCENT		32.33		5.53	5.03		.67		43.55	
AV LENGTH		530.93		559.61	535.70		598.75		536.16	
STD ERROR		1.70		5.36	3.67		10.31		1.50	
SAMP SIZE	0	193	0	33	30	0	4	0	260	
AV WEIGHT		2.62		3.27	2.65				2.72	
STD ERROR		.06		.18	.20				.06	
SAMP SIZE	0	20	0	4	3	0	0	0	27	
FEMALE	0	689,540	0	322,512	270,910	0	51,602	12,900	4,347,464	
PERCENT		47.91		4.19	3.52		.67	.17	56.45	
AV LENGTH		512.88		560.24	522.76		564.75	567.00	517.79	
STD ERROR		1.41		4.38	5.09		12.18		1.29	
SAMP SIZE	0	286	0	25	21	0	4	1	337	
AV WEIGHT		2.14		2.67	2.22				2.16	
STD ERROR		.05			.27				.05	
SAMP SIZE	0	29	0	1	2	0	0	0	32	
BOTH SEX	0	179,333	0	748,228	657,925	0	103,204	12,900	7,701,590	
PERCENT		80.23		9.72	8.54		1.34	.17	100.00	
AV LENGTH		520.15		559.88	530.37		581.75	567.00	525.79	
STD ERROR		1.09		3.59	3.01		7.98		.98	
SAMP SIZE	0	479	0	58	51	0	8	1	597	
AV WEIGHT		2.34		3.15	2.48				2.42	
STD ERROR		.04		.18	.16				.04	
SAMP SIZE	0	49	0	5	5	0	0	0	59	

-Continued-

Table 9. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 4 7/ 9- 7/15		AGE GROUP						TOTAL
	41	42	43	52	53	62	63	73	
MALE	0	117,602	0	228,190	282,955	0	36,510	9,128	2,674,385
PERCENT		37.30		4.02	4.98		.64	.16	47.11
AV LENGTH		534.51		586.52	548.97		590.50	616.00	541.52
STD ERROR		1.33		6.65	3.62		9.42		1.26
SAMP SIZE	0	232	0	25	31	0	4	1	293
AV WEIGHT		2.76		3.41	2.63		3.81		2.84
STD ERROR		.05		.24	.10				.05
SAMP SIZE	0	39	0	6	5	0	1	0	51
FEMALE	0	345,791	9,128	273,828	301,211	27,383	45,638	0	3,002,979
PERCENT		41.32	.16	4.82	5.31	.48	.80		52.89
AV LENGTH		519.03	501.00	562.60	534.00	576.33	567.80		525.71
STD ERROR		1.42		2.67	4.27	12.81	7.25		1.23
SAMP SIZE	0	257	1	30	33	3	5	0	329
AV WEIGHT		2.33		3.25	2.68		3.62		2.50
STD ERROR		.05		.14	.21				.04
SAMP SIZE	0	42	0	7	5	0	1	0	55
BOTH SEX	0	463,393	9,128	502,018	584,166	27,383	82,148	9,128	5,677,364
PERCENT		78.62	.16	8.84	10.29	.48	1.45	.16	100.00
AV LENGTH		526.37	501.00	573.47	541.25	576.33	577.89	616.00	533.16
STD ERROR		.98		3.36	2.82	12.81	5.81		.88
SAMP SIZE	0	489	1	55	64	3	9	1	622
AV WEIGHT		2.54		3.32	2.66		3.72		2.67
STD ERROR		.03		.14	.12				.03
SAMP SIZE	0	81	0	13	10	0	2	0	106

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Table 9. Naknek-Kvichak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								TOTAL
	41	42	43	52	53	62	63	73	
MALE	0	7,702,998	0	1,219,451	989,018	3,808	198,936	9,128	20,123,339
PERCENT		35.73		5.66	4.59	.02	.92	.04	46.96
AV LENGTH		530.64		560.57	539.56	594.00	578.57	616.00	536.16
STD ERROR		.77		2.78	2.31		7.38		.73
SAMP SIZE	0	873	0	136	106	1	23	1	1,140
AV WEIGHT		2.60		3.34	2.64	3.71	3.18		2.70
STD ERROR		.02		.10	.08		.27		.02
SAMP SIZE	0	205	0	34	22	1	8	0	270
FEMALE	3,808	9,107,557	9,128	1,136,846	943,772	41,712	180,310	12,900	21,436,033
PERCENT	.02	42.24	.04	5.27	4.38	.19	.84	.06	53.04
AV LENGTH	545.00	515.91	501.00	553.87	528.65	570.98	560.08	567.00	521.69
STD ERROR		.72		2.16	2.04	7.69	5.96		.65
SAMP SIZE	1	969	1	137	104	5	22	1	1,240
AV WEIGHT	2.67	2.23		2.84	2.44		3.29		2.32
STD ERROR		.02		.06	.06		.13		.02
SAMP SIZE	1	204	0	42	29	0	5	0	281
BOTH SEX	3,808	6,810,555	9,128	2,356,297	1,932,790	45,520	379,246	22,028	21,559,372
PERCENT	.02	77.97	.04	10.93	8.96	.21	1.76	.10	100.00
AV LENGTH	545.00	522.66	501.00	557.34	534.23	572.91	569.78	587.30	528.48
STD ERROR		.53		1.76	1.54	6.41	4.77		.48
SAMP SIZE	1	1,842	1	273	210	6	45	2	2,380
AV WEIGHT	2.67	2.40		3.10	2.54	3.71	3.22		2.50
STD ERROR		.02		.06	.05		.17		.02
SAMP SIZE	1	409	0	76	51	1	13	0	551

Table 10. Kvichak River apportioned catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP							TOTAL
	32	41	42	43	52	53	63	
<b>CATCH</b>								
<b>MALES</b>								
NUMBER	0	1,492	6,112,294	0	511,591	438,536	14,054	7,077,967
PERCENT	.00	.01	36.97	.00	3.09	2.65	.08	42.81
<b>FEMALES</b>								
NUMBER	0	1,493	8,383,029	7,571	422,303	585,021	57,517	9,456,934
PERCENT	.00	.01	50.70	.05	2.55	3.54	.35	57.19
<b>SEXES COMBINED</b>								
NUMBER	0	2,985	14,495,323	7,571	933,894	1,023,557	71,571	16,534,901
PERCENT	.00	.02	87.67	.05	5.65	6.19	.43	100.00
<b>ESCAPEMENT</b>								
<b>MALES</b>								
NUMBER	2,325	0	1,138,735	64,198	83,650	77,980	2,171	1,369,059
PERCENT	.07	.00	31.90	1.80	2.34	2.18	.06	38.35
<b>FEMALES</b>								
NUMBER	0	0	1,970,531	1,084	74,042	139,852	15,414	2,200,923
PERCENT	.00	.00	55.20	.03	2.07	3.92	.43	61.65
<b>SEXES COMBINED</b>								
NUMBER	2,325	0	3,109,266	65,282	157,692	217,832	17,585	3,569,982
PERCENT	.07	.00	87.09	1.83	4.42	6.10	.49	100.00
<b>CATCH AND ESCAPEMENT</b>								
<b>MALES</b>								
NUMBER	2,325	1,492	7,251,029	64,198	595,241	516,516	16,225	8,447,026
PERCENT	.01	.01	36.07	.32	2.96	2.57	.08	42.01
<b>FEMALES</b>								
NUMBER	0	1,493	10,353,560	8,655	496,345	724,873	72,931	11,657,857
PERCENT	.00	.01	51.50	.04	2.47	3.61	.36	57.99
<b>SEXES COMBINED</b>								
NUMBER	2,325	2,985	17,604,589	72,853	1,091,586	1,241,389	89,156	20,104,883
PERCENT	.01	.01	87.56	.36	5.43	6.17	.44	100.00

Table 11. Kvichak River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 18	0	0	.00	.00
19	0	0	.00	.00
20	66	66	.00	.00
21	150	216	.00	.01
22	174	390	.00	.01
23	54	444	.00	.01
24	48	492	.00	.01
25	6	498	.00	.01
26	6	504	.00	.01
27	2,628	3,132	.07	.09
28	139,062	142,194	3.90	3.98
29	378,324	520,518	10.60	14.58
30	422,922	943,440	11.85	26.43
JULY 1	422,352	1,365,792	11.83	38.26
2	316,806	1,682,598	8.87	47.13
3	96,084	1,778,682	2.69	49.82
4	86,694	1,865,376	2.43	52.25
5	99,576	1,964,952	2.79	55.04
6	46,890	2,011,842	1.31	56.35
7	42,204	2,054,046	1.18	57.54
8	155,844	2,209,890	4.37	61.90
9	349,170	2,559,060	9.78	71.68
10	95,220	2,654,280	2.67	74.35
11	31,884	2,686,164	.89	75.24
12	48,990	2,735,154	1.37	76.62
13	54,708	2,789,862	1.53	78.15
14	63,336	2,853,198	1.77	79.92
15	341,754	3,194,952	9.57	89.49
16	222,414	3,417,366	6.23	95.73
17	29,346	3,446,712	.82	96.55
18	39,834	3,486,546	1.12	97.66
19	52,686	3,539,232	1.48	99.14
20	19,266	3,558,498	.54	99.68
21	6,138	3,564,636	.17	99.85
22	4,170	3,568,806	.12	99.97
23	1,176	3,569,982	.03	100.00

Table 12. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

SAMPLE PERIOD 1 6/28- 7/ 1							
	AGE GROUP						TOTAL
	32	42	43	52	53	63	
MALE	0	471,500	0	42,864	23,380	0	537,744
PERCENT		34.52		3.14	1.71		39.37
AV LENGTH		521.45		540.18	532.67		523.43
STD ERROR		1.87		4.03	6.71		1.69
SAMP SIZE	0	242	0	22	12	0	276
FEMALE	0	711,148	0	46,760	58,450	11,690	828,048
PERCENT		52.07		3.42	4.28	.86	60.63
AV LENGTH		511.95		528.50	520.30	534.33	513.79
STD ERROR		1.11		4.55	4.15	8.98	1.04
SAMP SIZE	0	365	0	24	30	6	425
BOTH SEX	0	182,648	0	89,624	81,830	11,690	1,365,792
PERCENT		86.59		6.56	5.99	.86	100.00
AV LENGTH		515.74		534.09	523.83	534.33	517.59
STD ERROR		1.00		3.05	3.53	8.98	.92
SAMP SIZE	0	607	0	46	42	6	701
SAMPLE PERIOD 2 7/ 2- 7/ 7							
	AGE GROUP						TOTAL
	32	42	43	52	53	63	
MALE	1,084	209,186	15,174	3,252	4,335	0	233,031
PERCENT	.16	30.39	2.20	.47	.63		33.86
AV LENGTH	368.00	504.83	362.86	563.33	518.25		496.01
STD ERROR		2.91	16.12	22.04	7.24		2.85
SAMP SIZE	1	193	14	3	4	0	215
FEMALE	0	431,378	1,084	6,503	16,258	0	455,223
PERCENT		62.68	.16	.94	2.36		66.14
AV LENGTH		491.16	350.00	533.00	508.40		492.04
STD ERROR		1.23		10.53	7.09		1.20
SAMP SIZE	0	398	1	6	15	0	420
BOTH SEX	1,084	640,564	16,258	9,755	20,593	0	688,254
PERCENT	.16	93.07	2.36	1.42	2.99		100.00
AV LENGTH	368.00	495.62	362.00	543.11	510.47		493.38
STD ERROR		1.26	16.12	10.16	5.80		1.25
SAMP SIZE	1	591	15	9	19	0	635

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Table 12. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

SAMPLE PERIOD 3 7/ 8- 7/12							
	AGE GROUP						TOTAL
	32	42	43	52	53	63	
MALE	0	203,578	5,578	10,225	5,578	930	225,889
PERCENT		32.21	.88	1.62	.88	.15	35.74
AV LENGTH		516.88	352.17	556.91	534.83	523.00	515.09
STD ERROR		1.89	5.05	6.07	9.14		1.75
SAMP SIZE	0	219	6	11	6	1	243
FEMALE	0	381,130	0	8,366	16,733	0	406,229
PERCENT		60.29		1.32	2.65		64.26
AV LENGTH		496.71		555.89	525.50		499.11
STD ERROR		1.12		9.71	8.58		1.12
SAMP SIZE	0	410	0	9	18	0	437
BOTH SEX	0	584,708	5,578	18,591	22,311	930	632,118
PERCENT		92.50	.88	2.94	3.53	.15	100.00
AV LENGTH		503.73	352.17	556.45	527.83	523.00	504.82
STD ERROR		.98	5.05	5.50	6.83		.96
SAMP SIZE	0	629	6	20	24	1	680

SAMPLE PERIOD 4 7/13- 7/20							
	AGE GROUP						TOTAL
	32	42	43	52	53	63	
MALE	1,241	254,471	43,446	27,309	44,687	1,241	372,395
PERCENT	.14	28.79	4.92	3.09	5.06	.14	42.13
AV LENGTH	421.00	524.21	363.14	585.32	528.89	614.00	510.42
STD ERROR		1.86	3.95	4.81	5.42		1.55
SAMP SIZE	1	205	35	22	36	1	300
FEMALE	0	446,875	0	12,413	48,411	3,724	511,423
PERCENT		50.56		1.40	5.48	.42	57.87
AV LENGTH		504.07		555.70	515.26	567.67	506.85
STD ERROR		1.30		7.74	4.04	14.62	1.21
SAMP SIZE	0	360	0	10	39	3	412
BOTH SEX	1,241	701,346	43,446	39,722	93,098	4,965	883,818
PERCENT	.14	79.35	4.92	4.49	10.53	.56	100.00
AV LENGTH	421.00	511.38	363.14	576.06	521.80	579.25	508.35
STD ERROR		1.07	3.95	4.10	3.34	14.62	.96
SAMP SIZE	1	565	35	32	75	4	712

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Table 12. Kvichak River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

ALL PERIODS COMBINED							
	AGE GROUP						TOTAL
	32	42	43	52	53	63	
MALE	2,325	138,735	64,198	83,650	77,980	2,171	1,369,059
PERCENT	.07	31.90	1.80	2.34	2.18	.06	38.35
AV LENGTH	396.29	518.20	362.12	557.86	529.86	575.02	513.85
STD ERROR		1.06	4.84	2.88	3.79		.96
SAMP SIZE	2	859	55	58	58	2	1,034
FEMALE	0	970,531	1,084	74,042	139,852	15,414	2,200,923
PERCENT		55.20	.03	2.07	3.92	.43	61.65
AV LENGTH		502.66	350.00	536.55	517.79	542.38	504.97
STD ERROR		.59		3.51	2.69	7.72	.57
SAMP SIZE	0	1,533	1	49	102	9	1,694
BOTH SEX	2,325	109,266	65,282	157,692	217,832	17,585	3,569,982
PERCENT	.07	87.09	1.83	4.42	6.10	.49	100.00
AV LENGTH	396.29	508.35	361.92	547.86	522.11	546.41	508.37
STD ERROR		.54	4.76	2.24	2.20	6.31	.51
SAMP SIZE	2	2,392	56	107	160	11	2,728

Table 13. Branch River apportioned catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP							TOTAL
	41	42	43	52	53	62	63	
CATCH								
MALES								
NUMBER	40	203,390	0	28,390	17,692	188	4,234	253,934
PERCENT	.01	44.11	.00	6.16	3.84	.04	.92	55.07
FEMALES								
NUMBER	40	161,200	1,557	26,470	13,160	2,274	2,440	207,141
PERCENT	.01	34.96	.34	5.74	2.85	.49	.53	44.93
SEXES COMBINED								
NUMBER	80	364,590	1,557	54,860	30,852	2,462	6,674	461,075
PERCENT	.02	79.07	.34	11.90	6.69	.53	1.45	100.00
ESCAPEMENT								
MALES								
NUMBER	2,096	37,892	223	4,642	3,146	505	654	49,158
PERCENT	2.18	39.38	.23	4.82	3.27	.52	.68	51.09
FEMALES								
NUMBER	0	37,892	223	4,641	3,146	506	654	47,062
PERCENT	.00	39.38	.23	4.82	3.27	.53	.68	48.91
SEXES COMBINED								
NUMBER	2,096	75,784	446	9,283	6,292	1,011	1,308	96,220
PERCENT	2.18	78.76	.46	9.65	6.54	1.05	1.36	100.00
CATCH AND ESCAPEMENT								
MALES								
NUMBER	2,136	241,282	223	33,032	20,838	693	4,888	303,092
PERCENT	.38	43.30	.04	5.93	3.74	.12	.88	54.39
FEMALES								
NUMBER	40	199,092	1,780	31,111	16,306	2,780	3,094	254,203
PERCENT	.01	35.72	.32	5.58	2.93	.50	.56	45.61
SEXES COMBINED								
NUMBER	2,176	440,374	2,003	64,143	37,144	3,473	7,982	557,295
PERCENT	.39	79.02	.36	11.51	6.67	.62	1.43	100.00

Table 14. Naknek River apportioned catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP										TOTAL
	32	41	42	43	52	53	62	63	73	74	
CATCH											
MALES											
NUMBER	0	372	1,387,314	0	679,471	532,790	3,620	180,649	9,128	0	2,793,344
PERCENT	.00	.01	30.40	.00	14.89	11.68	.08	3.96	.20	.00	61.21
FEMALES											
NUMBER	0	371	563,328	0	688,072	345,591	39,438	120,352	12,900	0	1,770,052
PERCENT	.00	.01	12.34	.00	15.08	7.57	.86	2.64	.28	.00	38.79
SEXES COMBINED											
NUMBER	0	743	1,950,642	0	1,367,543	878,381	43,058	301,001	22,028	0	4,563,396
PERCENT	.00	.02	42.75	.00	29.97	19.25	.94	6.60	.48	.00	100.00
ESCAPEMENT											
MALES											
NUMBER	1,398	0	258,460	3,917	111,100	94,740	9,710	27,906	1,847	699	509,777
PERCENT	.16	.00	29.10	.44	12.51	10.67	1.09	3.14	.21	.08	57.39
FEMALES											
NUMBER	0	0	132,417	0	120,639	82,615	8,774	32,253	1,120	699	378,517
PERCENT	.00	.00	14.91	.00	13.58	9.30	.99	3.63	.13	.08	42.61
SEXES COMBINED											
NUMBER	1,398	0	390,877	3,917	231,739	177,355	18,484	60,159	2,967	1,398	888,294
PERCENT	.16	.00	44.00	.44	26.09	19.97	2.08	6.77	.33	.16	100.00
CATCH AND ESCAPEMENT											
MALES											
NUMBER	1,398	372	1,645,774	3,917	790,571	627,530	13,330	208,555	10,975	699	3,303,121
PERCENT	.03	.01	30.19	.07	14.50	11.51	.24	3.83	.20	.01	60.59
FEMALES											
NUMBER	0	371	695,745	0	808,711	428,206	48,212	152,605	14,020	699	2,148,569
PERCENT	.00	.01	12.76	.00	14.83	7.85	.88	2.80	.26	.01	39.41
SEXES COMBINED											
NUMBER	1,398	743	2,341,519	3,917	1,599,282	1,055,736	61,542	361,160	24,995	1,398	5,451,690
PERCENT	.03	.01	42.95	.07	29.34	19.37	1.13	6.62	.46	.03	100.00

Table 15. Naknek River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 18	0	0	.00	.00
19	0	0	.00	.00
20	132	132	.01	.01
21	48	180	.01	.02
22	36	216	.00	.02
23	384	600	.04	.07
24	228	828	.03	.09
25	168	996	.02	.11
26	24,042	25,038	2.71	2.82
27	70,614	95,652	7.95	10.77
28	76,950	172,602	8.66	19.43
29	86,148	258,750	9.70	29.13
30	55,164	313,914	6.21	35.34
JULY 1	40,680	354,594	4.58	39.92
2	23,568	378,162	2.65	42.57
3	33,582	411,744	3.78	46.35
4	27,390	439,134	3.08	49.44
5	27,612	466,746	3.11	52.54
6	32,784	499,530	3.69	56.23
7	66,420	565,950	7.48	63.71
8	29,202	595,152	3.29	67.00
9	33,048	628,200	3.72	70.72
10	22,362	650,562	2.52	73.24
11	83,070	733,632	9.35	82.59
12	41,982	775,614	4.73	87.32
13	27,282	802,896	3.07	90.39
14	30,114	833,010	3.39	93.78
15	6,972	839,982	.78	94.56
16	2,238	842,220	.25	94.81
17	6,984	849,204	.79	95.60
18	20,796	870,000	2.34	97.94
19	11,790	881,790	1.33	99.27
20	4,230	886,020	.48	99.74
21	2,274	888,294	.26	100.00

Table 16. Naknek River escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

SAMPLE PERIOD 1 6/26- 6/29										
	32	42	43	52	AGE GROUP				74	TOTAL
					53	62	63	73		
MALE	0	80,860	0	27,402	27,402	898	9,434	449	0	146,445
PERCENT		31.25		10.59	10.59	.35	3.65	.17		56.60
AV LENGTH		471.91		563.57	494.00	579.50	573.90	567.00		500.72
STD ERROR		2.27		4.88	4.75	5.50	7.36			1.85
SAMP SIZE	0	180	0	61	61	2	21	1	0	326
FEMALE	0	29,199	0	39,980	21,563	3,594	17,969	0	0	112,305
PERCENT		11.28		15.45	8.33	1.39	6.94			43.40
AV LENGTH		490.03		550.72	509.37	573.50	558.90			529.04
STD ERROR		2.88		2.63	3.04	15.67	3.62			1.54
SAMP SIZE	0	65	0	89	48	8	40	0	0	250
BOTH SEX	0	110,059	0	67,382	48,965	4,492	27,403	449	0	258,750
PERCENT		42.53		26.04	18.92	1.74	10.59	.17		100.00
AV LENGTH		476.72		555.95	500.77	574.70	564.06	567.00		513.01
STD ERROR		1.83		2.52	2.97	12.58	3.47			1.24
SAMP SIZE	0	245	0	150	109	10	61	1	0	576
SAMPLE PERIOD 2 6/30- 7/ 6										
	32	42	43	52	AGE GROUP				74	TOTAL
					53	62	63	73		
MALE	0	82,506	421	21,468	21,889	421	3,788	0	0	130,493
PERCENT		34.27	.17	8.92	9.09	.17	1.57			54.20
AV LENGTH		459.26	340.00	561.45	488.10	609.00	586.67			484.71
STD ERROR		2.08		5.65	4.80		8.48			1.83
SAMP SIZE	0	196	1	51	52	1	9	0	0	310
FEMALE	0	45,882	0	32,413	23,994	1,684	5,893	421	0	110,287
PERCENT		19.06		13.46	9.97	.70	2.45	.17		45.80
AV LENGTH		474.73		540.83	496.18	596.75	563.71	625.00		506.01
STD ERROR		2.34		2.94	3.63	7.57	9.68			1.62
SAMP SIZE	0	109	0	77	57	4	14	1	0	262
BOTH SEX	0	128,388	421	53,881	45,883	2,105	9,681	421	0	240,780
PERCENT		53.32	.17	22.38	19.06	.87	4.02	.17		100.00
AV LENGTH		464.79	340.00	549.05	492.33	599.20	572.69	625.00		494.47
STD ERROR		1.58		2.86	2.97	7.57	6.76			1.24
SAMP SIZE	0	305	1	128	109	5	23	1	0	572

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Table 16. Naknek River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

SAMPLE PERIOD 3 7/ 7- 7/19										
	AGE GROUP									TOTAL
	32	42	43	52	53	62	63	73	74	
MALE	1,398	95,094	3,496	62,230	45,449	8,391	14,684	1,398	699	232,839
PERCENT	.36	24.46	.90	16.01	11.69	2.16	3.78	.36	.18	59.89
AV LENGTH	339.00	470.50	340.80	571.55	516.03	573.17	578.10	615.00	594.00	515.38
STD ERROR	6.00	3.10	7.30	2.63	3.82	12.35	4.05	27.00		1.73
SAMP SIZE	2	136	5	89	65	12	21	2	1	333
FEMALE	0	57,336	0	48,246	37,058	3,496	8,391	699	699	155,925
PERCENT		14.75		12.41	9.53	.90	2.16	.18	.18	40.11
AV LENGTH		483.06		551.04	502.11	577.20	550.08	600.00	536.00	515.10
STD ERROR		2.75		2.36	3.64	16.32	10.34			1.67
SAMP SIZE	0	82	0	69	53	5	12	1	1	223
BOTH SEX	1,398	152,430	3,496	110,476	82,507	11,887	23,075	2,097	1,398	388,764
PERCENT	.36	39.21	.90	28.42	21.22	3.06	5.94	.54	.36	100.00
AV LENGTH	339.00	475.22	340.80	562.59	509.78	574.36	567.91	610.00	565.00	515.27
STD ERROR	6.00	2.20	7.30	1.80	2.66	9.95	4.56	27.00		1.23
SAMP SIZE	2	218	5	158	118	17	33	3	2	556

ALL PERIODS COMBINED										
	AGE GROUP									TOTAL
	32	42	43	52	53	62	63	73	74	
MALE	1,398	258,460	3,917	111,100	94,740	9,710	27,906	1,847	699	509,77
PERCENT	.16	29.10	.44	12.51	10.67	1.09	3.14	.21	.08	57.3
AV LENGTH	339.00	467.35	340.71	567.63	503.21	575.31	577.84	603.33	594.00	503.3
STD ERROR	6.00	1.40	6.09	2.37	2.56	9.90	3.77	18.00		1.0
SAMP SIZE	2	512	6	201	178	15	51	3	1	96
FEMALE	0	132,417	0	120,639	82,615	8,774	32,253	1,120	699	378,51
PERCENT		14.91		13.58	9.30	.99	3.63	.13	.08	42.6
AV LENGTH		481.71		548.19	502.28	579.44	557.48	609.40	536.00	516.5
STD ERROR		1.52		1.55	2.01	8.98	3.55			.9
SAMP SIZE	0	256	0	235	158	17	66	2	1	73
BOTH SEX	1,398	390,877	3,917	231,739	177,355	18,484	60,159	2,967	1,398	888,29
PERCENT	.16	44.00	.44	26.09	19.97	2.08	6.77	.33	.16	100.0
AV LENGTH	339.00	472.22	340.71	557.51	502.78	577.27	566.93	605.62	565.00	508.9
STD ERROR	6.00	1.06	6.09	1.37	1.65	6.66	2.59	10.80		.7
SAMP SIZE	2	768	6	436	336	32	117	5	2	1,70

Table 17. Naknek-Kvichak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg), 1983.

	SAMPLE PERIOD 7/21/83 - 7/21/83				
	AGE GROUP				TOTAL
	32	42	52	62	
MALE	471	1,885	471	3,771	6,598
PERCENT	5.26	21.05	5.26	42.11	73.68
AV LENGTH	445.00	633.25	607.00	900.13	770.47
STD ERROR		62.36		17.05	20.31
SAMP SIZE	1	4	1	8	14
AV WEIGHT	1.63	3.50		12.17	8.69
STD ERROR		1.05		.85	.62
SAMP SIZE	1	3	0	8	12
FEMALE	0	0	0	2,357	2,357
PERCENT				26.32	26.32
AV LENGTH				902.20	902.20
STD ERROR				23.72	23.72
SAMP SIZE	0	0	0	5	5
AV WEIGHT				13.13	13.13
STD ERROR				1.23	1.23
SAMP SIZE	0	0	0	5	5
BOTH SEX	471	1,885	471	6,128	8,955
PERCENT	5.26	21.05	5.26	68.43	100.00
AV LENGTH	445.00	633.25	607.00	900.93	805.14
STD ERROR		62.36		13.90	16.21
SAMP SIZE	1	4	1	13	19
AV WEIGHT	1.63	3.50		12.54	9.93
STD ERROR		1.05		.70	.57
SAMP SIZE	1	3	0	13	17

Table 18. Branch River escapement of chinook salmon sex, age, and length (mm), 1983.

SAMPLE PERIOD 8/27/83 - 8/30/83									
	AGE GROUP								TOTAL
	32	42	52	62	63	72	73	83	
MALE	161	140	719	365	97	21	43	11	1,557
PERCENT	4.60	4.00	20.54	10.43	2.77	.60	1.23	.31	44.49
AV LENGTH	411.33	695.46	876.06	928.32	892.78	952.00	975.00	1012.00	829.78
STD ERROR	17.53	29.15	7.82	12.30	16.36	62.00	11.21		5.78
SAMP SIZE	15	13	67	34	9	2	4	1	145
FEMALE	0	11	784	923	75	32	118	0	1,943
PERCENT		.31	22.40	26.37	2.14	.91	3.37		55.51
AV LENGTH		797.00	879.60	893.06	870.43	912.33	887.36		886.18
STD ERROR			5.12	5.20	23.80	9.35	11.59		3.42
SAMP SIZE	0	1	73	86	7	3	11	0	181
BOTH SEX	161	151	1,503	1,288	172	53	161	11	3,500
PERCENT	4.60	4.31	42.94	36.80	4.91	1.51	4.60	.31	100.00
AV LENGTH	411.33	702.86	877.91	903.05	883.03	928.05	910.77	1012.00	861.09
STD ERROR	17.53	27.06	4.60	5.10	13.90	25.43	9.01		3.20
SAMP SIZE	15	14	140	120	16	5	15	1	326

Table 19. Naknek River escapement of chinook salmon sex, age, and length (mm), 1983.

	SAMPLE PERIOD 8/25/83 - 9/22/83										TOTAL
	AGE GROUP										
	32	42	43	52	53	62	63	72	73	83	
MALE	282	1,014	56	3,383	56	3,099	56	56	56	56	8,114
PERCENT	1.99	7.14	.39	23.82	.39	21.82	.39	.39	.39	.39	57.14
AV LENGTH	439.20	607.78	454.00	816.20	448.00	930.29	860.00	919.00	836.00	974.00	817.82
STD ERROR	16.40	24.39		16.24		7.49					7.98
SAMP SIZE	5	18	1	60	1	55	1	1	1	1	144
FEMALE	0	0	0	1,803	0	3,888	0	282	113	0	6,086
PERCENT				12.70		27.38		1.99	.80		42.86
AV LENGTH				836.16		864.42		876.80	836.00		856.09
STD ERROR				6.92		5.91		19.99	34.00		4.44
SAMP SIZE	0	0	0	32	0	69	0	5	2	0	108
BOTH SEX	282	1,014	56	5,186	56	6,987	56	338	169	56	14,200
PERCENT	1.99	7.14	.39	36.52	.39	49.20	.39	2.38	1.19	.39	100.00
AV LENGTH	439.20	607.78	454.00	823.14	448.00	893.64	860.00	883.79	836.00	974.00	834.23
STD ERROR	16.40	24.39		10.86		4.67		16.66	22.67		4.94
SAMP SIZE	5	18	1	92	1	124	1	6	3	1	252

Table 20. Egegik District commercial salmon catch by species and fishing effort by gear type, 1983.

period	hours	drift	set	Sockeye	Chinook	Chua Pink	Coho	Total
June	7	24	1	26	7	10	7	24
	8	24	2		25	38	8	71
	9	24	2		5	79	4	88
	10	24	8		43	126	19	188
	11	9	3		41	177	26	244
	13	15	14		637	66	66	769
	14	24	53		2,801	174	116	3,091
	15	24	56	82	3,110	201	320	3,631
	16	24	71		6,852	253	627	7,732
	17	24	101		14,883	399	1,567	16,849
	18	9	66		6,263	172	1,197	7,632
	20	15	238	106	45,979	356	1,876	48,211
	21	24	270		39,909	448	1,746	42,103
	22	24	197	153	35,361	414	1,029	36,804
	23	9	131		48,286	317	1,733	50,336
	26	2	8		13,685		56	13,741
	27	12	206	177	479,065	211	4,468	483,744
	28	12	148		310,986	138	3,374	314,498
	29	24	198		461,209	196	5,010	466,415
	30	24	187	199	408,762	133	4,618	413,513
July	1	24	197		481,357	128	6,768	488,253
	2	24	207		405,227	103	5,223	410,553
	3	24	212		365,425	118	3,731	369,274
	4	24	206	187	421,823	58	4,166	426,047
	5	24	208		438,166	63	5,661	443,890
	6	24	224		449,421	41	7,727	457,189
	7	24	216		461,239	65	7,261	468,565
	8	24	219		333,113	53	4,697	337,863
	9	24	160		220,514	61	4,601	225,176
	10	24	137		232,506	32	4,961	237,499
	11	24	148		236,666	27	4,341	241,034
	12	24	143	195	186,350	18	4,021	190,389
	13	24	111		173,982	10	4,465	178,457
	14	24	174		167,732	17	5,446	173,195
	15	24	171		92,842	20	4,841	97,703
	16	9	83		61,505	9	5,253	66,768
	17	24	28		17,111	7	678	17,796
	18	24	62		35,762	3	2,619	38,384
	19	24	64	104	44,750	9	3,472	48,231
	20	24	41		22,200	2	2,592	24,794
	21	24	26		12,692	4	1,692	14,388
	22	9	19		9,451	1	650	10,108
	23	15	4		1,511		168	1,692
	25	24	9		2,819	1	293	3,191
	26	24	1		760		536	1,418
	27	24	9		984		850	1,981
	28	24	2		674		847	1,808
	29	24	1		438		337	1,005
	30	9	1		178		140	441
August	1	15	2		21		167	418
	2	24	1		4		176	383
	3	24	3		92		109	391
	4	24	2		8		206	546
	5	24	1		15		106	278
	8	15	2				106	324
	9	24	2		4		211	1,114
	10	24	4		2		236	1,116
	11	24	4		2		77	883
	12	24	3		1		49	994
	13	9	2				13	268
	15	15	2				3	1,559
	16	24	4				26	2,147
	17	24	6				62	2,287
	18	24	6				17	1,473
	19	24	2				5	1,672
	20	9	2				7	363
	22	15	2				1	912
	23	24	4				3	2,147
	24	24	3				6	1,973
	25	24	2					995
	26	24	2					1,526
	27	9	1					25
	29	15	2					1,234
	30	24	2					932
	31	24	3					571
September	1	24	1					223
	2	24	1					17
total				6,755,256	4,758	127,490	92	25,954
percent of district catch				97.7	0.1	1.8	0.0	0.4

Table 21. Egegik River catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP							TOTAL	
	32	42	43	52	53	62	63		64
<b>CATCH</b>									
<b>MALES</b>									
NUMBER	0	331,126	0	220,250	2,678,931	3,783	250,957	29,207	3,514,254
PERCENT	.00	4.90	.00	3.26	39.66	.06	3.71	.43	52.02
<b>FEMALES</b>									
NUMBER	0	291,556	7,566	232,527	2,410,381	8,390	269,848	20,734	3,241,002
PERCENT	.00	4.32	.11	3.44	35.68	.12	3.99	.31	47.98
<b>SEXES COMBINED</b>									
NUMBER	0	622,682	7,566	452,777	5,089,312	12,173	520,805	49,941	6,755,256
PERCENT	.00	9.22	.11	6.70	75.34	.18	7.71	.74	100.00
<b>ESCAPEMENT</b>									
<b>MALES</b>									
NUMBER	1,086	28,326	1,687	14,097	281,971	572	29,879	1,628	359,246
PERCENT	.14	3.58	.21	1.78	35.59	.07	3.77	.21	45.34
<b>FEMALES</b>									
NUMBER	0	32,697	0	14,434	346,214	572	39,119	0	433,036
PERCENT	.00	4.13	.00	1.82	43.70	.07	4.94	.00	54.66
<b>SEXES COMBINED</b>									
NUMBER	1,086	61,023	1,687	28,531	628,185	1,144	68,998	1,628	792,282
PERCENT	.14	7.70	.21	3.60	79.29	.14	8.71	.21	100.00
<b>CATCH AND ESCAPEMENT</b>									
<b>MALES</b>									
NUMBER	1,086	359,452	1,687	234,347	2,960,902	4,355	280,836	30,835	3,873,500
PERCENT	.01	4.76	.02	3.10	39.23	.06	3.72	.41	51.32
<b>FEMALES</b>									
NUMBER	0	324,253	7,566	246,961	2,756,595	8,962	308,967	20,734	3,674,038
PERCENT	.00	4.30	.10	3.27	36.52	.12	4.09	.27	48.68
<b>SEXES COMBINED</b>									
NUMBER	1,086	683,705	9,253	481,308	5,717,497	13,317	589,803	51,569	7,547,538
PERCENT	.01	9.06	.12	6.38	75.75	.18	7.81	.68	100.00

Table 22. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983.

	SAMPLE PERIOD 1 6/20- 7/ 2		AGE GROUP					TOTAL
	42	43	52	53	62	63	64	
MALE	167,870	0	85,721	971,501	0	142,868	17,858	385,818
PERCENT	6.07		3.10	35.14		5.17	.65	50.13
AV LENGTH	530.32		578.50	542.15		589.43	543.00	547.85
STD ERROR	2.44		5.99	1.21		5.24	3.73	1.11
SAMP SIZE	47	0	24	272	0	40	5	388
AV WEIGHT	2.52		3.04	2.70		3.53	2.92	2.85
STD ERROR	.06		.14	.04		.16	.02	.04
SAMP SIZE	12	0	12	46	0	13	2	85
FEMALE	117,866	0	114,294	960,787	7,143	167,870	10,715	378,675
PERCENT	4.26		4.13	34.75	.26	6.07	.39	49.87
AV LENGTH	515.73		572.00	530.62	587.00	583.11	523.33	539.40
STD ERROR	2.60		3.78	.97	9.00	3.59	8.33	.89
SAMP SIZE	33	0	32	269	2	47	3	386
AV WEIGHT	2.36		2.53	2.35	3.51	3.22		2.56
STD ERROR	.08		.16	.04	.20	.14		.04
SAMP SIZE	9	0	3	31	2	10	0	55
BOTH SEX	285,736	0	200,015	1,932,288	7,143	310,738	28,573	764,493
PERCENT	10.34		7.24	69.90	.26	11.24	1.03	100.00
AV LENGTH	524.30		574.79	536.42	587.00	586.02	535.62	543.64
STD ERROR	1.79		3.36	.78	9.00	3.09	3.90	.71
SAMP SIZE	80	0	56	541	2	87	8	774
AV WEIGHT	2.45		2.94	2.56	3.51	3.40	2.92	2.74
STD ERROR	.05		.12	.03	.20	.11	.02	.03
SAMP SIZE	21	0	15	77	2	23	2	140

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Table 22. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 2 7/ 3- 7/11							TOTAL
	42	43	52	AGE GROUP		63	64	
				53	62			
MALE	102,143	0	98,360	1,365,693	3,783	75,662	11,349	656,990
PERCENT	3.23		3.11	43.23	.12	2.40	.36	52.46
AV LENGTH	528.78		595.54	546.01	617.00	599.60	545.00	550.49
STD ERROR	3.50		4.38	.96		7.20	2.64	.92
SAMP SIZE	27	0	26	361	1	20	3	438
AV WEIGHT	2.25		3.37	2.70		3.42	3.05	2.75
STD ERROR	.10		.05	.06		.44		.05
SAMP SIZE	3	0	3	38	0	2	1	47
FEMALE	143,757	7,566	90,794	1,168,972	0	87,011	3,783	501,883
PERCENT	4.55	.24	2.87	37.01		2.75	.12	47.54
AV LENGTH	518.76	394.00	573.58	529.47		582.87	533.00	533.53
STD ERROR	3.61	9.00	3.92	.87		4.03		.83
SAMP SIZE	38	2	24	309	0	23	1	397
AV WEIGHT	2.02		2.71	2.31		3.13		2.37
STD ERROR	.16		.36	.04		.03		.04
SAMP SIZE	2	0	3	30	0	2	0	37
BOTH SEX	245,900	7,566	189,154	2,534,665	3,783	162,673	15,132	158,873
PERCENT	7.78	.24	5.99	80.24	.12	5.15	.48	100.00
AV LENGTH	522.92	394.00	585.00	538.38	617.00	590.65	542.00	542.43
STD ERROR	2.56	9.00	2.95	.65		3.98	2.64	.62
SAMP SIZE	65	2	50	670	1	43	4	835
AV WEIGHT	2.16		3.04	2.53		3.28	3.05	2.58
STD ERROR	.09		.18	.04		.22		.04
SAMP SIZE	5	0	6	68	0	4	1	84

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Table 22. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 3 7/12- 7/19		AGE GROUP					TOTAL
	42	43	52	53	62	63	64	
MALE	61,113	0	36,169	341,737	0	32,427	0	471,446
PERCENT	7.35		4.35	41.08		3.90		56.67
AV LENGTH	534.33		598.00	550.84		604.12		555.98
STD ERROR	2.83		4.03	1.15		5.10		1.02
SAMP SIZE	49	0	29	274	0	26	0	378
AV WEIGHT	2.67		3.56	2.83		2.90		2.87
STD ERROR	.12		.28	.06				.06
SAMP SIZE	7	0	4	30	0	1	0	42
FEMALE	29,933	0	27,439	280,622	1,247	14,967	6,236	360,444
PERCENT	3.60		3.30	33.73	.15	1.80	.75	43.33
AV LENGTH	513.33		568.86	530.74	609.00	589.17	523.20	534.76
STD ERROR	3.91		4.52	1.08		4.41	3.68	.98
SAMP SIZE	24	0	22	225	1	12	5	289
AV WEIGHT	1.64		3.10	2.34				2.37
STD ERROR			.10	.05				.05
SAMP SIZE	1	0	2	24	0	0	0	27
BOTH SEX	91,046	0	63,608	622,359	1,247	47,394	6,236	831,890
PERCENT	10.94		7.65	74.81	.15	5.70	.75	100.00
AV LENGTH	527.43		585.43	541.78	609.00	599.40	523.20	546.79
STD ERROR	2.29		3.01	.79		3.76	3.68	.72
SAMP SIZE	73	0	51	499	1	38	5	667
AV WEIGHT	2.54		3.41	2.61		2.90		2.68
STD ERROR	.12		.19	.04				.04
SAMP SIZE	8	0	6	54	0	1	0	69

-Continued-

Table 22. Egegik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

ALL PERIODS COMBINED								
	AGE GROUP							TOTAL
	42	43	52	53	62	63	64	
MALE	331,126	0	220,250	2,678,931	3,783	250,957	29,207	3,514,254
PERCENT	4.90		3.26	39.66	.06	3.71	.43	52.02
AV LENGTH	530.59		589.31	545.23	617.00	594.39	543.78	550.19
STD ERROR	1.65		2.75	.63		3.34	2.53	.59
SAMP SIZE	123	0	79	907	1	86	8	1,204
AV WEIGHT	2.46		3.27	2.72		3.42	2.97	2.78
STD ERROR	.05		.11	.03		.14	.01	.03
SAMP SIZE	22	0	19	114	0	16	3	174
FEMALE	291,556	7,566	232,527	2,410,381	8,390	269,848	20,734	3,241,002
PERCENT	4.32	.11	3.44	35.68	.12	3.99	.31	47.98
AV LENGTH	516.98	394.00	572.25	530.08	590.27	583.37	525.06	536.17
STD ERROR	1.97	9.00	2.34	.55	6.00	2.44	3.45	.52
SAMP SIZE	95	2	78	803	3	82	9	1,072
AV WEIGHT	2.12		2.67	2.33	3.51	3.19		2.41
STD ERROR	.07		.15	.03	.20	.12		.03
SAMP SIZE	12	0	8	85	2	12	0	119
BOTH SEX	622,682	7,566	452,777	5,089,312	12,173	520,805	49,941	6,755,256
PERCENT	9.22	.11	6.70	75.34	.18	7.71	.74	100.00
AV LENGTH	524.21	394.00	580.55	538.05	598.58	588.68	536.00	543.46
STD ERROR	1.27	9.00	1.81	.42	4.50	2.08	2.18	.39
SAMP SIZE	218	2	157	1,710	4	168	17	2,276
AV WEIGHT	2.30		2.96	2.53	3.51	3.30	2.97	2.60
STD ERROR	.04		.09	.02	.20	.10	.01	.02
SAMP SIZE	34	0	27	199	2	28	3	293

Table 23. Egegik River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 9	0	0	.00	.00
10	0	0	.00	.00
11	0	0	.00	.00
12	0	0	.00	.00
13	0	0	.00	.00
14	0	0	.00	.00
15	0	0	.00	.00
16	0	0	.00	.00
17	0	0	.00	.00
18	0	0	.00	.00
19	0	0	.00	.00
20	0	0	.00	.00
21	240	240	.03	.03
22	4,950	5,190	.62	.66
23	786	5,976	.10	.75
24	2,352	8,328	.30	1.05
25	7,656	15,984	.97	2.02
26	12,192	28,176	1.54	3.56
27	25,512	53,688	3.22	6.78
28	63,360	117,048	8.00	14.77
29	156,672	273,720	19.77	34.55
30	168,462	442,182	21.26	55.81
JULY 1	77,466	519,648	9.78	65.59
2	54,150	573,798	6.83	72.42
3	14,250	588,048	1.80	74.22
4	12,888	600,936	1.63	75.85
5	30,396	631,332	3.84	79.69
6	25,818	657,150	3.26	82.94
7	26,184	683,334	3.30	86.25
8	15,162	698,496	1.91	88.16
9	10,332	708,828	1.30	89.47
10	5,220	714,048	.66	90.13
11	4,320	718,368	.55	90.67
12	4,986	723,354	.63	91.30
13	3,234	726,588	.41	91.71
14	6,042	732,630	.76	92.47
15	6,582	739,212	.83	93.30
16	2,106	741,318	.27	93.57
17	2,712	744,030	.34	93.91
18	6,918	750,948	.87	94.78
19	13,434	764,382	1.70	96.48
20	9,312	773,694	1.18	97.65
21	9,300	782,994	1.17	98.83
22	4,446	787,440	.56	99.39
23	2,466	789,906	.31	99.70
24	2,376	792,282	.30	100.00

Table 24. Egegik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

	SAMPLE PERIOD 1 6/26- 6/30								
	AGE GROUP								TOTAL
	32	42	43	52	53	62	63	64	
MALE	0	12,585	1,144	10,297	175,042	572	21,737	0	221,377
PERCENT		2.85	.26	2.33	39.59	.13	4.92		50.06
AV LENGTH		534.14	385.00	597.33	544.82	545.00	597.63		551.02
STD ERROR		3.64	19.00	5.59	1.22		4.54		1.12
SAMP SIZE	0	22	2	18	306	1	38	0	387
FEMALE	0	13,157	0	6,292	168,178	572	32,606	0	220,805
PERCENT		2.98		1.42	38.03	.13	7.37		49.94
AV LENGTH		514.04		571.73	527.39	602.00	580.21		535.85
STD ERROR		3.36		6.43	1.11		3.34		1.02
SAMP SIZE	0	23	0	11	294	1	57	0	386
BOTH SEX	0	25,742	1,144	16,589	343,220	1,144	54,343	0	442,182
PERCENT		5.82	.26	3.75	77.62	.26	12.29		100.00
AV LENGTH		523.87	385.00	587.62	536.28	573.50	587.18		543.44
STD ERROR		2.47	19.00	4.24	.82		2.70		.76
SAMP SIZE	0	45	2	29	600	2	95	0	773

-Continued-

Table 24. Egegik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

	SAMPLE PERIOD 2 7/ 1- 7/18								
	AGE GROUP								
	32	42	43	52	53	62	63	64	TOTAL
MALE	1,086	15,741	543	3,800	106,929	0	8,142	1,628	137,869
PERCENT	.31	4.50	.16	1.09	30.54		2.33	.47	39.38
AV LENGTH	349.50	527.48	390.00	565.43	543.80		601.93	555.33	543.97
STD ERROR	21.50	4.83		8.30	1.47		4.57	18.27	1.35
SAMP SIZE	2	29	1	7	197	0	15	3	254
FEMALE	0	19,540	0	8,142	178,036	0	6,513	0	212,231
PERCENT		5.58		2.33	50.85		1.86		60.62
AV LENGTH		509.36		569.87	522.36		577.67		524.68
STD ERROR		2.85		5.56	1.06		6.45		.97
SAMP SIZE	0	36	0	15	328	0	12	0	391
BOTH SEX	1,086	35,281	543	11,942	284,965	0	14,655	1,628	350,100
PERCENT	.31	10.08	.16	3.41	81.40		4.19	.47	100.00
AV LENGTH	349.50	517.44	390.00	568.46	530.41		591.15	555.33	532.28
STD ERROR	21.50	2.67		4.62	.86		3.83	18.27	.79
SAMP SIZE	2	65	1	22	525	0	27	3	645

-Continued-

Table 24. Egegik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								TOTAL
	32	42	43	52	53	62	63	64	
MALE	1,086	28,326	1,687	14,097	281,971	572	29,879	1,628	359,246
PERCENT	.14	3.58	.21	1.78	35.59	.07	3.77	.21	45.34
AV LENGTH	349.50	530.44	386.61	588.73	544.43	545.00	598.80	555.33	548.31
STD ERROR	21.50	3.16	12.67	4.65	.94		3.50	18.27	.86
SAMP SIZE	2	51	3	25	503	1	53	3	641
FEMALE	0	32,697	0	14,434	346,214	572	39,119	0	433,036
PERCENT		4.13		1.82	43.70	.07	4.94		54.66
AV LENGTH		511.24		570.68	524.80	602.00	579.79		530.38
STD ERROR		2.18		4.20	.77		2.98		.70
SAMP SIZE	0	59	0	26	622	1	69	0	777
BOTH SEX	1,086	61,023	1,687	28,531	628,185	1,144	68,998	1,628	792,282
PERCENT	.14	7.70	.21	3.60	79.29	.14	8.71	.21	100.00
AV LENGTH	349.50	520.15	386.61	579.60	533.61	573.50	588.02	555.33	538.51
STD ERROR	21.50	1.87	12.67	3.13	.60		2.27	18.27	.55
SAMP SIZE	2	110	3	51	1,125	2	122	3	1,418

Table 25. Egegik District escapement of chinook salmon sex, age, and length (mm), 1983.

SAMPLE PERIOD	8/20/83 - 8/21/83					TOTAL
	AGE GROUP					
	32	52	62	63	72	
MALE	129	259	0	0	0	388
PERCENT	7.99	16.04				24.02
AV LENGTH	608.00	744.25				698.95
STD ERROR	17.00	41.58				28.29
SAMP SIZE	2	4	0	0	0	6
FEMALE	0	710	323	129	65	1,227
PERCENT		43.96	20.00	7.99	4.02	75.98
AV LENGTH		831.36	816.00	829.00	922.00	831.87
STD ERROR		18.74	21.44	21.00		12.43
SAMP SIZE	0	11	5	2	1	19
BOTH SEX	129	969	323	129	65	1,615
PERCENT	7.99	60.00	20.00	7.99	4.02	100.00
AV LENGTH	608.00	808.08	816.00	829.00	922.00	799.94
STD ERROR	17.00	17.66	21.44	21.00		11.63
SAMP SIZE	2	15	5	2	1	25

Note: Escapement estimates from King Salmon River.

Table 26. Egegik District commercial catch of coho salmon sex, age, length (mm), and weight (kg), 1983.

	SAMPLE PERIOD 8/ 9/83 - 8/26/83					TOTAL
	AGE GROUP					
	32	43	54	42	53	
MALE	2,579	10,640	645	0	161	14,025
PERCENT	9.94	41.00	2.49		.62	54.04
AV LENGTH	546.31	562.41	589.00		643.00	561.60
STD ERROR	9.94	5.42	19.68			4.59
SAMP SIZE	16	66	4	0	1	87
AV WEIGHT	2.68	3.53				3.36
STD ERROR		.32				.28
SAMP SIZE	1	7	0	0	0	8
FEMALE	1,934	7,577	1,128	484	806	11,929
PERCENT	7.45	29.19	4.35	1.86	3.11	45.96
AV LENGTH	531.92	572.87	594.57	576.00	584.80	569.22
STD ERROR	10.63	5.02	11.74	7.81	19.29	4.02
SAMP SIZE	12	47	7	3	5	74
AV WEIGHT	2.49	3.09	3.21			2.99
STD ERROR		.24	.40			.19
SAMP SIZE	1	5	3	0	0	9
BOTH SEX	4,513	18,217	1,773	484	967	25,954
PERCENT	17.39	70.19	6.83	1.86	3.73	100.00
AV LENGTH	540.14	566.76	592.54	576.00	594.49	565.10
STD ERROR	7.28	3.79	10.34	7.81	16.08	3.09
SAMP SIZE	28	113	11	3	6	161
AV WEIGHT	2.60	3.35	3.21			3.20
STD ERROR		.21	.40			.17
SAMP SIZE	2	12	3	0	0	17

Table 27. Ugashik District commercial salmon catch by species and fishing effort by gear type, 1983.

period	hours	drift	set	Sockeye	Chinook	Chum	Pink	Coho	Total
May 30	15		1		13				13
31	24		6		163				163
June 1	24		8		112				112
2	24		10		188				188
3	24		10		80				80
4	9		2		12				12
6	15		14		157				157
7	24		24	7	411				411
8	24		29		345				345
9	24		36		549				549
10	24		28		542				542
11	9		12		221				221
13	15		8	5	201				206
14	24		28	83	802				885
15	24		31	107	831				938
16	24		29	336	955				1,291
17	24		21	425	436	26			887
18	9		11	623	233	43			899
20	15		29	16	3,687	572	235		4,494
21	24		39		9,957	587	522		11,066
22	24		43		25,539	355	1,086		26,980
23	9		16		3,597	78	190		3,865
26	2		87		10				10
27	12		63	32	67,094	64	1,605		68,763
28			1		667	8	16		691
29	11		44		66,342	52	1,433		67,827
30	24		85	40	166,237	330	2,409		168,976
July 1	14		99	47	138,043	178	2,334		140,555
3	9		71		118,373	29	3,640		122,042
4	24		99	56	247,651	108	4,477		252,236
5	17		108		160,340	85	3,530		163,955
6			1		1,359		33		1,392
7	6		21		27,518	33	999		28,550
8	19		149	50	419,826	45	10,140		430,011
9	4		47		92,748	5	2,087		94,840
10	24		186	70	424,026	66	10,527		434,619
11	24		196		370,081	47	11,767		381,895
12	24		235	53	393,851	39	12,246		406,136
13	24		198		171,234	60	8,737		180,031
14	24		145		80,928	25	4,616		85,569
15	24		91		51,084	36	2,437		53,557
16	9		83		64,860	44	3,132		68,036
17	24		95		79,170	53	5,232		84,455
18	24		60		44,841	19	3,003		47,863
19	24		73	39	41,379	29	2,729		44,137
20	24		69		24,380	34	1,739		26,153
21	24		43		15,693	11	1,525		17,229
22	9		32		11,392	25	1,248		12,665
23	15		6		1,952	4	164		2,120
25	24		1		1,436	1	34		1,471
26	24		2		5,141		149	3	5,293
27	24		3		4,658	3	253	1	4,915
28	24		1		4,747		142	11	4,900
29	24		1		3,159		192	11	3,362
30	9		2		3,534		400	26	3,960
August 1	15		1		389		2	9	400
2	24		2		625		60	6	691
3	24		1		215		30	14	259
4	24		1		29		2	14	45
5	24		1		9			6	15
8	15		1		14			18	32
9	24		1		17			33	50
10	24		1		8			86	94
11	24		1		7			43	50
12	24		1		14			93	107
13	9		1					24	24
15	15		1		4			79	83
16	24		1		2			95	97
17	24		1		2			115	117
18	24		2		2			570	572
19	24		3					614	614
20	9		7		1			490	491
22	15		3					867	867
23	24		2					594	594
24	24		6					771	771
25	24		3					503	503
26	24		2					402	402
27	9		3					235	235
29	15		2					321	321
30	24		3					526	526
31	24		3					432	432
September 1	24		3					373	373
2	24		3					344	344
3	9		2					87	87
total				3,349,451	9,276	105,171	0	7,816	3,471,714
percent of district catch				96.5	0.3	3.0	0.0	0.2	

Table 28. Ugashik River catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP									TOTAL
	32	42	43	52	53	62	63	64	74	
CATCH										
MALES										
NUMBER	0	1,111,267	0	125,213	372,509	6,261	50,085	0	0	1,665,335
PERCENT	.00	33.18	.00	3.74	11.12	.19	1.50	.00	.00	49.72
FEMALES										
NUMBER	0	1,007,966	0	203,471	372,509	3,130	87,649	6,261	3,130	1,684,116
PERCENT	.00	30.09	.00	6.07	11.12	.09	2.62	.19	.09	50.28
SEXES COMBINED										
NUMBER	0	2,119,233	0	328,684	745,018	9,391	137,734	6,261	3,130	3,349,451
PERCENT	.00	63.27	.00	9.81	22.24	.28	4.11	.19	.09	100.00
ESCAPEMENT										
MALES										
NUMBER	393	291,382	3,000	20,538	22,253	0	14,214	0	0	351,780
PERCENT	.04	29.12	.30	2.05	2.22	.00	1.42	.00	.00	35.16
FEMALES										
NUMBER	194	542,869	4,676	40,376	45,130	194	15,395	0	0	648,834
PERCENT	.02	54.25	.47	4.04	4.51	.02	1.54	.00	.00	64.84
SEXES COMBINED										
NUMBER	587	834,251	7,676	60,914	67,383	194	29,609	0	0	1,000,614
PERCENT	.06	83.37	.77	6.09	6.73	.02	2.96	.00	.00	100.00
CATCH AND ESCAPEMENT										
MALES										
NUMBER	393	1,402,649	3,000	145,751	394,762	6,261	64,299	0	0	2,017,115
PERCENT	.01	32.24	.07	3.35	9.07	.14	1.48	.00	.00	46.37
FEMALES										
NUMBER	194	1,550,835	4,676	243,847	417,639	3,324	103,044	6,261	3,130	2,332,950
PERCENT	.00	35.65	.11	5.61	9.60	.08	2.37	.14	.07	53.63
SEXES COMBINED										
NUMBER	587	2,953,484	7,676	389,598	812,401	9,585	167,343	6,261	3,130	4,350,065
PERCENT	.01	67.90	.18	8.96	18.68	.22	3.85	.14	.07	100.00

Table 29. Ugashik District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg), 1983.

SAMPLE PERIOD 6/16 - 7/15								
	AGE GROUP							TOTAL
	42	52	53	62	63	64	74	
MALE	1,111,267	125,213	372,509	6,261	50,085	0	0	1,665,335
PERCENT	33.18	3.74	11.12	.19	1.50			49.72
AV LENGTH	536.81	590.85	544.03	612.50	581.44			544.11
STD ERROR	1.03	4.38	1.74	20.50	8.55			.90
SAMP SIZE	355	40	119	2	16	0	0	532
AV WEIGHT	2.60	3.61	2.81		2.50			2.72
STD ERROR	.08	.27	.18					.07
SAMP SIZE	25	5	7	0	1	0	0	38
FEMALE	1,007,966	203,471	372,509	3,130	87,649	6,261	3,130	1,684,116
PERCENT	30.09	6.07	11.12	.09	2.62	.19	.09	50.28
AV LENGTH	516.73	570.09	525.85	645.00	577.71	553.50	595.00	528.89
STD ERROR	.87	2.72	1.32		4.19	28.50		.72
SAMP SIZE	322	65	119	1	28	2	1	538
AV WEIGHT	2.13	2.69	2.30		2.65			2.26
STD ERROR	.03	.23	.04		.05			.03
SAMP SIZE	26	3	13	0	2	0	0	44
BOTH SEX	2,119,233	328,684	745,018	9,391	137,734	6,261	3,130	3,349,451
PERCENT	63.27	9.81	22.24	.28	4.11	.19	.09	100.00
AV LENGTH	527.26	578.00	534.94	623.33	579.07	553.50	595.00	536.46
STD ERROR	.68	2.37	1.09	13.67	4.09	28.50		.58
SAMP SIZE	677	105	238	3	44	2	1	1,070
AV WEIGHT	2.38	3.04	2.56		2.60			2.49
STD ERROR	.04	.19	.07		.03			.04
SAMP SIZE	51	8	20	0	3	0	0	82

Table 30. Ugashik River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 20	0	0	.00	.00
21	0	0	.00	.00
22	0	0	.00	.00
23	6	6	.00	.00
24	54	60	.01	.01
25	90	150	.01	.01
26	84	234	.01	.02
27	66	300	.01	.03
28	12	312	.00	.03
29	102	414	.01	.04
30	276	690	.03	.07
JULY 1	18	708	.00	.07
2	942	1,650	.09	.16
3	2,178	3,828	.22	.38
4	138	3,966	.01	.40
5	30	3,996	.00	.40
6	49,374	53,370	4.93	5.33
7	9,252	62,622	.92	6.26
8	21,630	84,252	2.16	8.42
9	12,342	96,594	1.23	9.65
10	31,104	127,698	3.11	12.76
11	200,904	328,602	20.08	32.84
12	72,840	401,442	7.28	40.12
13	71,016	472,458	7.10	47.22
14	173,064	645,522	17.30	64.51
15	132,630	778,152	13.25	77.77
16	38,958	817,110	3.89	81.66
17	14,634	831,744	1.46	83.12
18	10,236	841,980	1.02	84.15
19	12,318	854,298	1.23	85.38
20	14,862	869,160	1.49	86.86
21	19,416	888,576	1.94	88.80
22	12,846	901,422	1.28	90.09
23	11,448	912,870	1.14	91.23
24	6,150	919,020	.61	91.85
25	3,168	922,188	.32	92.16
26	4,884	927,072	.49	92.65
27	14,550	941,622	1.45	94.10
28	13,836	955,458	1.38	95.49
29	14,250	969,708	1.42	96.91
30	12,732	982,440	1.27	98.18
31	9,684	992,124	.97	99.15
AUG 1	4,824	996,948	.48	99.63
2	3,462	1,000,410	.35	99.98
3	204	1,000,614	.02	100.00

Table 31. Ugashik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

SAMPLE PERIOD 1		7/ 3- 7/10						
	AGE GROUP							
	32	42	43	52	53	62	63	TOTAL
MALE	0	61,814	388	3,876	2,325	0	581	68,984
PERCENT		48.41	.30	3.04	1.82		.45	54.02
AV LENGTH		543.06	375.50	614.15	551.25		622.33	547.06
STD ERROR		1.09	9.50	5.32	5.16		17.75	1.05
SAMP SIZE	0	319	2	20	12	0	3	356
FEMALE	194	51,156	0	2,907	2,519	194	1,744	58,714
PERCENT	.15	40.06		2.28	1.97	.15	1.37	45.98
AV LENGTH	360.00	520.43		570.60	529.08	632.00	585.11	525.04
STD ERROR		1.07		5.69	4.24		4.13	1.00
SAMP SIZE	1	264	0	15	13	1	9	303
BOTH SEX	194	112,970	388	6,783	4,844	194	2,325	127,698
PERCENT	.15	88.47	.30	5.31	3.79	.15	1.82	100.00
AV LENGTH	360.00	532.81	375.50	595.49	539.72	632.00	594.42	536.94
STD ERROR		.77	9.50	3.89	3.31		5.41	.73
SAMP SIZE	1	583	2	35	25	1	12	659

SAMPLE PERIOD 2		7/11- 7/14						
	AGE GROUP							
	32	42	43	52	53	62	63	TOTAL
MALE	0	138,971	1,770	7,967	15,048	0	7,967	171,723
PERCENT		26.84	.34	1.54	2.91		1.54	33.16
AV LENGTH		543.25	411.00	604.11	543.71		619.00	548.26
STD ERROR		1.65	21.00	6.77	5.63		5.40	1.50
SAMP SIZE	0	157	2	9	17	0	9	194
FEMALE	0	270,862	2,656	28,325	33,636	0	10,622	346,101
PERCENT		52.31	.51	5.47	6.50		2.05	66.84
AV LENGTH		519.56	390.67	578.28	524.92		580.08	525.76
STD ERROR		1.00	12.33	4.87	3.16		3.89	.95
SAMP SIZE	0	306	3	32	38	0	12	391
BOTH SEX	0	409,833	4,426	36,292	48,684	0	18,589	517,824
PERCENT		79.15	.85	7.01	9.40		3.59	100.00
AV LENGTH		527.59	398.80	583.95	530.73		596.76	533.22
STD ERROR		.87	11.19	4.08	2.79		3.21	.80
SAMP SIZE	0	463	5	41	55	0	21	585

-Continued-

Table 31. Ugashik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

SAMPLE PERIOD 3 7/15- 7/17								
	AGE GROUP							TOTAL
	32	42	43	52	53	62	63	
MALE	0	46,219	449	3,590	1,346	0	1,346	52,950
PERCENT		24.82	.24	1.93	.72		.72	28.43
AV LENGTH		538.02	377.00	592.75	539.67		583.00	541.55
STD ERROR		2.01		10.31	10.84		5.03	1.93
SAMP SIZE	0	103	1	8	3	0	3	118
FEMALE	0	120,707	449	4,039	5,833	0	2,244	133,272
PERCENT		64.82	.24	2.17	3.13		1.21	71.57
AV LENGTH		510.84	390.00	578.11	512.38		570.40	513.54
STD ERROR		1.33		6.84	4.30		6.50	1.25
SAMP SIZE	0	269	1	9	13	0	5	297
BOTH SEX	0	166,926	898	7,629	7,179	0	3,590	186,222
PERCENT		89.64	.48	4.10	3.86		1.93	100.00
AV LENGTH		518.37	383.50	585.00	517.50		575.13	521.51
STD ERROR		1.11		6.05	4.04		4.48	1.05
SAMP SIZE	0	372	2	17	16	0	8	415

SAMPLE PERIOD 4 7/18- 7/20								
	AGE GROUP							TOTAL
	32	42	43	52	53	62	63	
MALE	393	44,378	393	5,105	3,534	0	4,320	58,123
PERCENT	.23	26.28	.23	3.02	2.09		2.56	34.42
AV LENGTH	444.00	535.88	390.00	611.85	551.89		612.91	547.65
STD ERROR		1.77		5.62	5.12		7.19	1.59
SAMP SIZE	1	113	1	13	9	0	11	148
FEMALE	0	100,144	1,571	5,105	3,142	0	785	110,747
PERCENT		59.30	.93	3.02	1.86		.46	65.58
AV LENGTH		511.92	378.00	568.08	507.12		597.50	513.08
STD ERROR		1.32	10.29	7.21	6.25		10.50	1.26
SAMP SIZE	0	255	4	13	8	0	2	282
BOTH SEX	393	144,522	1,964	10,210	6,676	0	5,105	168,870
PERCENT	.23	85.58	1.16	6.05	3.95		3.02	100.00
AV LENGTH	444.00	519.28	380.40	589.97	530.82		610.54	524.98
STD ERROR		1.06	10.29	4.57	4.00		6.29	.99
SAMP SIZE	1	368	5	26	17	0	13	430

-Continued-

Table 31. Ugashik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

ALL PERIODS COMBINED								
	AGE GROUP							
	32	42	43	52	53	62	63	TOTAL
MALE	393	291,382	3,000	20,538	22,253	0	14,214	351,780
PERCENT	.04	29.12	.30	2.05	2.22		1.42	35.16
AV LENGTH	444.00	541.26	398.57	605.94	545.55		613.88	546.91
STD ERROR		.75	7.68	3.30	3.10		4.16	.70
SAMP SIZE	1	692	6	50	41	0	26	816
FEMALE	194	542,869	4,676	40,376	45,130	194	15,395	648,834
PERCENT	.02	54.25	.47	4.04	4.51	.02	1.54	64.84
AV LENGTH	360.00	516.29	386.35	576.42	522.29	632.00	580.13	521.02
STD ERROR		.59	6.92	3.05	2.11		2.54	.55
SAMP SIZE	1	1,094	8	69	72	1	28	1,273
BOTH SEX	587	834,251	7,676	60,914	67,383	194	29,609	1,000,614
PERCENT	.06	83.37	.77	6.09	6.73	.02	2.96	100.00
AV LENGTH	416.24	525.01	391.12	586.37	529.97	632.00	596.33	530.12
STD ERROR		.46	5.15	2.24	1.75		2.40	.43
SAMP SIZE	2	1,786	14	119	113	1	54	2,089

Table 32. Ugashik District commercial catch of chinook salmon sex, age, length (mm), and weight (kg), 1983.

	SAMPLE PERIOD 6/16/83 - 6/17/83			
	AGE GROUP			TOTAL
	42	52	62	
MALE	488	651	4,069	5,208
PERCENT	5.26	7.02	43.87	56.14
AV LENGTH	568.33	630.75	841.00	789.17
STD ERROR	35.65	41.14	11.71	11.01
SAMP SIZE	3	4	25	32
AV WEIGHT	.98	1.62	1.06	1.12
STD ERROR	.29	.52	.05	.09
SAMP SIZE	3	4	23	30
FEMALE	0	651	3,417	4,068
PERCENT		7.02	36.84	43.86
AV LENGTH		728.00	822.19	807.12
STD ERROR		73.49	8.43	13.72
SAMP SIZE	0	4	21	25
AV WEIGHT		.87	.91	.90
STD ERROR		.15	.03	.04
SAMP SIZE	0	4	20	24
BOTH SEX	488	1,302	7,486	9,276
PERCENT	5.26	14.04	80.70	100.00
AV LENGTH	568.33	679.38	832.41	797.04
STD ERROR	35.65	42.11	7.44	8.63
SAMP SIZE	3	8	46	57
AV WEIGHT	.98	1.25	.99	1.03
STD ERROR	.29	.27	.03	.05
SAMP SIZE	3	8	43	54

Table 33. Ugashik District escapement of chinook salmon sex, age, and length (mm), 1983.

	SAMPLE PERIOD 8/13/83 - 8/15/83						TOTAL
	AGE GROUP						
	32	42	52	62	63	72	
MALE	341	227	1,437	378	76	0	2,459
PERCENT	9.29	6.19	39.16	10.30	2.07		67.00
AV LENGTH	554.11	656.50	824.26	875.50	928.00		782.39
STD ERROR	16.26	26.02	13.30	25.52	20.00		9.33
SAMP SIZE	9	6	38	10	2	0	65
FEMALE	0	38	643	341	151	38	1,211
PERCENT		1.04	17.52	9.29	4.11	1.04	33.00
AV LENGTH		786.00	826.76	847.33	872.25	928.00	840.12
STD ERROR			11.70	15.04	19.82		7.91
SAMP SIZE	0	1	17	9	4	1	32
BOTH SEX	341	265	2,080	719	227	38	3,670
PERCENT	9.29	7.22	56.68	19.59	6.19	1.04	100.00
AV LENGTH	554.11	675.07	825.03	862.14	890.92	928.00	801.44
STD ERROR	16.26	22.30	9.88	15.20	14.80		6.78
SAMP SIZE	9	7	55	19	6	1	97

Note: Escapement estimates from Mother Goose system and outlet of Ugashik River.

#### Nushagak-Igushik District:

Over 6 million salmon of all species were harvested in the Nushagak-Igushik District. Almost 87% of the catch were sockeye salmon (Table 34). The Nushagak-Igushik District inshore run of sockeye salmon, i.e., catch plus the escapement, from the six rivers was over 6.8 million fish (Table 35). The aerial survey estimate of 3,000 spawners in the Snake River system was relatively small and appears as a footnote in Table 35. Sex, age, weight, and length data on the Nushagak-Igushik District catch, which does not include the Igushik beach setnet catch, is presented in Table 36. Separate data for the Igushik beach setnet catch are presented in Tables 37 and 38.

There are five river systems that drain into this district: Wood, Igushik, Nuyakuk, Snake, and Nushagak. To determine the total sockeye salmon to each of the Wood, Igushik, and Nuyakuk Rivers, the catch in the Nushagak-Igushik District, less the Igushik beach setnet catch, was apportioned to the three river systems according to the escapements of the different age class in each of the rivers. The Igushik beach setnet catch was allocated entirely to the Igushik River. There are few lake rearing areas on the Nushagak and Mulchatna Rivers and most sockeye salmon from those two rivers migrate to sea earlier than other Bristol Bay salmon. Catches were therefore not allocated to the Nushagak and Mulchatna because those early seaward migrating sockeye salmon, i.e., in the one-freshwater age class, are rarely caught in the Nushagak-Igushik District harvest. Catches were also not allocated to the Snake River because the Snake River escapement was less than 1% of the total Nushagak-Igushik District escapement.

The total run to the Wood River was estimated to be 4.4 million (Table 39). The Wood River daily escapement counts and the age, sex, and length statistics are presented in Tables 40 and 41, respectively. The total run to the Igushik River was estimated to be .7 million (Table 42). The Igushik River daily escapement counts and the age, sex, and length statistics are presented in Tables 43 and 44, respectively. The total run to the Nuyakuk River was estimated to be 1.7 million (Table 45). The Nuyakuk River daily escapement counts and the age, sex, and length statistics are presented in Tables 46 and 47, respectively.

The headwaters of the Nushagak River system includes the Nuyakuk River (Tikchik Lake system), the Mulchatna River as well as the Nushagak River. Only the Nuyakuk River had daily escapement counts. An escapement of 85,000 in the Nushagak and Mulchatna Rivers were estimated through aerial surveys. The number of spawners in both the Nushagak and the Mulchatna Rivers were less than 27% of that counted in the Nuyakuk River and appear as a footnote to the daily Nuyakuk escapement counts in Table 46.

Chum, coho, and chinook salmon catches were 10, 1, and 3% of the total harvest, respectively. Sex, age, weight, and length data on the catch and escapement of chinook salmon are presented in Tables 48 and 49. Similar data for chum commercial catch and escapement are presented in Tables 50 and 51.

#### Togiak District:

The Togiak District, including the Kulukak section catches, had a harvest of nearly 960,000 fish with sockeye salmon catches being 62% of the total

harvest (Table 52). Total sockeye salmon return of catch plus escapement in this district was nearly 780,000 (Table 53 and Appendix 3). Sex, age, weight, and length data on the sockeye salmon catch are presented in Table 54. Daily Togiak Lake escapement counts are presented in Table 55. Togiak District escapement counts, including spawners seen down river of the counting tower, spawners counted in other tributaries within the Togiak District, but not including spawners from the Kulukak system, added up to 213,000 spawners (Appendix Table 3. Sex, age, weight, and length data on the escapement are presented in Table 56.

Chinook and chum catches were another 34 and 4% of the total harvest, respectively. Sex, age, weight, and length data on the catch and escapement of chinook and chum salmon are presented in Tables 57 through 60.

#### Return from Brood Year Escapement

Appendix Tables 4 through 14 presents the sockeye salmon return from escapement by brood year for eleven Bristol Bay river systems incorporating the Japanese mothership, South Peninsula, and Togiak River only data presented in Appendix Tables 1 through 3. All the allocated catches in the Nushagak-Igushik District have been revised. There were only a few years when age composition data were available for the Nushagak-Mulchatna system and the Snake River (Appendix Tables 11 and 12). The revised allocated catches were only to the rivers when age data were available. Appendix Tables 15 and 16 presents the chinook salmon return from escapement by brood year for the Nushagak and Togiak Rivers, respectively. Appendix Table 17 presents the 1977 Nushagak-Mulchatna escapement of sockeye salmon age composition data which was not previously reported but presented in Appendix Table 11.

Table 34. Nushagak District commercial salmon catch by species and fishing effort by gear type, 1983.

period	hours	drift	set	Sockeye	Chinook	Chum	Pink	Coho	Total
May	20	24	1		46				46
	21	9	1		8				8
	24	24	4		34				34
	25	24	3		21				21
	26	24	7		48				48
	27	24	20		486				486
	28	9	19		349				349
	30	15	85		1,790				1,790
	31	24	97		1,074				1,074
June	1	24	155		1,633				1,633
	2	24	106		683				683
	3	24	103		815				815
	4	9	68		943				943
	6	15	188		2,195				2,195
	7	24	403		8,856				8,856
	8	24	383		5,335				5,335
	9	24	403	2	6,208				6,210
	10	24	325	5	3,899	6			3,910
	11	9	166		1,824				1,824
	13	15	340	156	7,042	18			7,216
	14	24	571	48	866	15,911	43		16,820
	15	9	403		41	5,941	35		6,017
	23	12	351	66	54,762	2,393	5,841		62,996
	25	12	210	63	23,612	1,105	2,632		27,349
	26	12	510		408,154	27,182	63,292		498,628
	28	12	556	230	477,089	6,217	66,521		549,827
	3	18	393	233	863,700	7,061	113,319	2	984,082
July	4	24	372		409,252	5,103	54,738		469,093
	5	24	377		424,375	2,539	53,964	3	480,881
	6	24	367		392,439	3,405	55,796	2	451,642
	7	24	345		334,536	3,300	45,728	1	383,565
	8	24	326		282,616	1,917	40,266	6	324,805
	9	24	221		148,521	1,044	25,495	6	175,066
	10	24	204		162,223	942	26,700	7	189,872
	11	24	237		185,547	701	31,064	13	217,325
	12	24	248		247,222	1,123	37,683	5	286,036
	13	24	292		299,885	3,580	45,032	4	348,501
	14	24	208		117,625	1,101	12,572	2	131,307
	15	24	202		56,762	454	7,113	5	64,341
	16	24	39		37,754	203	3,566	3	41,595
	17	24	92		53,463	273	5,160	7	58,952
	18	24	132		44,599	350	5,527	8	50,509
	19	24	89		29,925	340	3,719	7	33,998
	20	24	61		20,630	275	2,644	11	23,647
	21	24	76		19,052	285	3,048	9	22,855
	22	24	61		11,550	230	2,366	7	14,929
	23	9	6		2,341	25	307	10	2,756
	25	15	60		3,050	64	1,390	8	5,250
	26	24	42		2,682	75	1,170	2	5,082
	27	24	26		1,606	23	578	2	2,535
	28	24	18		1,086	35	399	1	1,648
	29	24	5		669	19	102	2	811
	30	9			46	1	2	1	50
August	1	15	40		396	107	2,051	1	4,322
	2	24	72		652	148	3,184	1	6,359
	3	24	59		268	95	982	1	4,114
	4	24	53		167	54	519	1	4,414
	5	24	51		116	28	265	12	4,457
	6	9	17		58	11	64	3	3,969
	8	15	41		7	3	18	2	2,361
	9	24	35		55	17	25	1	1,222
	10	24	31		55	6	44	1	1,280
	11	24	23		15	4	23	3	1,385
	12	24	13		34	72	18	3	1,516
	13	9	3		11	4	13	1	895
	15	15	3				5	1	603
	16	24	10	20	12	8		2	153
	17	24	5	4	16	4		2	2,342
	18	24	3	10	9			1	4,901
	19	24	5		1			1	4,925
	22	15		12	2			1	192
	23	24	9	10	20	1		1	3,818
	24	24	3	4	1			1	3,567
	25	24	2	4	3			1	3,581
	26	24	7	2	2			1	2,203
	27	9	2					1	1,165
	29	15	7					1	1,170
	30	24	10					1	325
	31	24	1		1			1	325
September	1	24	3					1	2,386
	2	24	1					1	698
	5	15	1					1	698
	6	24	2					1	5,983
	7	24	1					1	5,983
	8	24						1	3,792
								1	3,792
								1	1,292
								1	1,293
								1	193
								1	183
								1	404
								1	99
								1	158
								1	41
total				5,119,744	137,123	725,060	137	81,338	6,063,402
percent of district catch				84.4	2.3	12.0	0.0	1.3	

Table 35. Nushagak District inshore return of sockeye salmon by age group and sex, 1983.

	AGE GROUP									TOTAL
	31	32	41	42	43	52	53	62	63	
MALES										
CATCH	2,780	0	2,292	1,007,386	0	928,362	260,389	89,245	21,926	2,312,380
ESCAPEMENT	0	0	93	392,645	792	183,964	127,015	2,798	6,355	713,662
TOTAL	2,780	0	2,385	1,400,031	792	1,112,326	387,404	92,043	28,281	3,026,042
PERCENT	.09	.00	.08	46.27	.03	36.76	12.80	3.04	.93	100.00
FEMALES										
CATCH	0	1,146	1,146	1,174,936	0	1,163,127	184,060	92,546	19,145	2,636,106
ESCAPEMENT	0	0	0	636,769	0	221,432	276,749	4,756	6,644	1,146,350
TOTAL	0	1,146	1,146	1,811,705	0	1,384,559	460,809	97,302	25,789	3,782,456
PERCENT	.00	.03	.03	47.90	.00	36.60	12.18	2.57	.68	100.00
SEXES COMBINED										
CATCH	2,780	1,146	3,438	2,182,322	0	2,091,489	444,449	181,791	41,071	4,948,486
ESCAPEMENT	0	0	93	1,029,414	792	405,396	403,764	7,554	12,999	1,860,012
TOTAL	2,780	1,146	3,531	3,211,736	792	2,496,885	848,213	189,345	54,070	6,808,498
PERCENT	.04	.02	.05	47.17	.01	36.67	12.46	2.78	.79	100.00

Note: Does not include 171,258 Igushik beach setnet commercial catch.  
Does not include 3,080 spawners in Snake Lake.

Table 36. Nushagak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983.

	SAMPLE PERIOD 1 6/24- 6/29								TOTAL
	AGE GROUP								
	31	32	41	42	52	53	62	63	
MALE	0	0	2,292	177,664	143,278	41,264	4,585	8,024	377,107
PERCENT			.25	19.16	15.45	4.45	.49	.87	40.67
AV LENGTH			453.50	516.55	574.74	529.28	606.50	557.14	541.63
STD ERROR			45.50	2.03	2.74	3.57	16.58	13.93	1.54
SAMP SIZE	0	0	2	155	125	36	4	7	329
AV WEIGHT				2.44	3.22	2.61			2.74
STD ERROR				.06	.12	.12			.06
SAMP SIZE	0	0	0	43	28	7	0	0	78
FEMALE	0	1,146	1,146	192,565	283,117	41,264	22,924	8,024	550,186
PERCENT		.12	.12	20.77	30.53	4.45	2.47	.87	59.33
AV LENGTH		571.00	523.00	503.20	551.49	517.14	582.00	564.29	533.45
STD ERROR				1.45	1.25	3.60	6.14	8.29	.91
SAMP SIZE	0	1	1	168	247	36	20	7	480
AV WEIGHT				2.14	2.79	2.35	3.54	2.83	2.58
STD ERROR				.04	.04	.10	.21	.16	.03
SAMP SIZE	0	0	0	40	64	12	7	2	125
BOTH SEX	0	1,146	3,438	370,229	426,395	82,528	27,509	16,048	927,293
PERCENT		.12	.37	39.93	45.98	8.90	2.97	1.73	100.00
AV LENGTH		571.00	476.67	509.61	559.30	523.21	586.08	560.72	536.78
STD ERROR			45.50	1.23	1.24	2.54	5.81	8.11	.83
SAMP SIZE	0	1	3	323	372	72	24	14	809
AV WEIGHT				2.30	2.92	2.45	3.54	2.83	2.64
STD ERROR				.04	.05	.08	.21	.16	.03
SAMP SIZE	0	0	0	83	92	19	7	2	203

-Continued-

Table 36. Nushagak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 2 6/30- 7/ 7								TOTAL
	AGE GROUP								
	31	32	41	42	52	53	62	63	
MALE	2,780	0	0	522,697	358,660	158,478	27,803	13,902	1,084,320
PERCENT	.12			22.35	15.34	6.78	1.19	.59	46.37
AV LENGTH	470.00			520.90	577.33	531.60	626.50	579.80	544.46
STD ERROR				1.65	2.37	2.22	4.39	9.81	1.18
SAMP SIZE	1	0	0	188	129	57	10	5	390
AV WEIGHT				2.38	3.45	2.64	4.85	3.12	2.84
STD ERROR				.05	.09	.06	.23		.04
SAMP SIZE	0	0	0	48	34	13	2	1	98
FEMALE	0	0	0	603,327	519,918	97,311	22,242	11,121	1,253,919
PERCENT				25.80	22.24	4.16	.95	.48	53.63
AV LENGTH				505.11	551.96	516.74	583.25	559.50	527.31
STD ERROR				1.17	1.40	3.10	4.66	5.56	.85
SAMP SIZE	0	0	0	217	187	35	8	4	451
AV WEIGHT				2.13	2.75	2.23	3.20		2.41
STD ERROR				.04	.05	.07	.13		.03
SAMP SIZE	0	0	0	52	43	13	3	0	111
BOTH SEX	2,780	0	0	1,126,024	878,578	255,789	50,045	25,023	2,338,239
PERCENT	.12			48.16	37.57	10.94	2.14	1.07	100.00
AV LENGTH	470.00			512.44	562.32	525.95	607.28	570.78	535.26
STD ERROR				.99	1.27	1.81	3.20	5.98	.71
SAMP SIZE	1	0	0	405	316	92	18	9	841
AV WEIGHT				2.25	3.06	2.44	3.86	3.12	2.61
STD ERROR				.03	.05	.05	.12		.02
SAMP SIZE	0	0	0	100	77	26	5	1	209

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Table 36. Nushagak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 3 7/ 8- 7/19								
	AGE GROUP								
	31	32	41	42	52	53	62	63	TOTAL
MALE	0	0	0	307,025	426,424	60,647	56,857	0	850,953
PERCENT				18.24	25.34	3.60	3.38		50.56
AV LENGTH				527.57	583.22	547.00	616.00		562.75
STD ERROR				1.77	1.53	4.21	3.62		1.07
SAMP SIZE	0	0	0	162	225	32	30	0	449
AV WEIGHT				2.46	3.62	2.79	3.93		3.17
STD ERROR				.08	.06	.12	.22		.05
SAMP SIZE	0	0	0	29	45	5	3	0	82
FEMALE	0	0	0	379,044	360,092	45,485	47,380	0	832,001
PERCENT				22.52	21.40	2.70	2.82		49.44
AV LENGTH				509.09	556.04	524.58	584.64		534.56
STD ERROR				1.58	1.49	4.32	4.15		1.02
SAMP SIZE	0	0	0	200	190	24	25	0	439
AV WEIGHT				2.21	2.96	2.20	3.37		2.62
STD ERROR				.05	.08	.17	.14		.04
SAMP SIZE	0	0	0	49	44	5	9	0	107
BOTH SEX	0	0	0	686,069	786,516	106,132	104,237	0	1,682,954
PERCENT				40.77	46.73	6.31	6.19		100.00
AV LENGTH				517.36	570.78	537.39	601.75		548.81
STD ERROR				1.18	1.07	3.04	2.73		.74
SAMP SIZE	0	0	0	362	415	56	55	0	888
AV WEIGHT				2.30	3.29	2.50	3.51		2.86
STD ERROR				.04	.05	.10	.12		.03
SAMP SIZE	0	0	0	78	89	10	12	0	189

-Continued-

Table 36. Nushagak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								TOTAL
	31	32	41	42	52	53	62	63	
MALE	2,780	0	2,292	1,007,386	928,362	260,389	89,245	21,926	2,312,380
PERCENT	.06		.05	20.36	18.76	5.26	1.80	.44	46.73
AV LENGTH	470.00		453.50	522.17	579.64	534.82	618.78	571.51	550.73
STD ERROR			45.50	1.04	1.20	1.80	3.06	9.10	.71
SAMP SIZE	1	0	2	505	479	125	44	12	1,168
AV WEIGHT				2.41	3.49	2.67	4.23	3.12	2.95
STD ERROR				.03	.05	.05	.16		.03
SAMP SIZE	0	0	0	120	107	25	5	1	258
FEMALE	0	1,146	1,146	1,174,936	1,163,127	184,060	92,546	19,145	2,636,106
PERCENT		.02	.02	23.74	23.50	3.72	1.87	.39	53.27
AV LENGTH		571.00	523.00	506.08	553.11	518.77	583.65	561.51	530.88
STD ERROR				.81	.79	2.09	3.11	5.65	.54
SAMP SIZE	0	1	1	585	624	95	53	11	1,370
AV WEIGHT				2.16	2.82	2.25	3.37	2.83	2.50
STD ERROR				.02	.03	.06	.10	.16	.02
SAMP SIZE	0	0	0	141	151	30	19	2	343
BOTH SEX	2,780	1,146	3,438	2,182,322	2,091,489	444,449	181,791	41,071	4,948,486
PERCENT	.06	.02	.07	44.10	42.27	8.98	3.67	.83	100.00
AV LENGTH	470.00	571.00	476.67	513.51	564.88	528.17	600.90	566.85	540.15
STD ERROR			30.33	.65	.69	1.36	2.20	5.46	.44
SAMP SIZE	1	1	3	1,090	1,103	220	97	23	2,538
AV WEIGHT				2.28	3.12	2.50	3.78	3.01	2.71
STD ERROR				.02	.03	.04	.09	.11	.02
SAMP SIZE	0	0	0	261	258	55	24	3	601

Note: Does not include 171,258 Igushik beach setnet commercial catch.

Table 37. Igushik beach setnet commercial catch of sockeye salmon, 1983.

period	hours	catch
June 23	12	22,878
25	24	8,406
28	12	6,110
July 3	18	19,100
4	24	28,193
5	24	13,564
6	24	15,579
7	24	9,627
8	24	10,492
9	24	5,776
10	24	2,142
11	24	2,541
12	24	7,158
13	24	7,250
14	24	7,862
15	24	503
16	24	716
17	24	834
18	24	1,038
19	24	804
20	24	685
total		171,258

Table 38. Igushik beach setnet commercial catch of sockeye salmon sex, age, length (mm), and weight (kg), 1983.

	SAMPLE PERIOD 6/24/83 - 7/15/83							TOTAL
	41	42	52	AGE GROUP			73	
				53	62	63		
MALE	180	35,581	33,425	10,243	539	899	180	81,047
PERCENT	.11	20.78	19.52	5.98	.31	.52	.11	47.32
AV LENGTH	538.00	526.56	573.89	539.49	555.00	577.80	630.00	548.73
STD ERROR		1.52	2.04	2.20	22.07	14.86		1.13
SAMP SIZE	1	198	186	57	3	5	1	451
AV WEIGHT		2.68	3.34	2.79		3.67		2.98
STD ERROR		.06	.07	.08		.64		.04
SAMP SIZE	0	46	48	20	0	2	0	116
FEMALE	0	49,777	28,214	10,243	539	1,438	0	90,211
PERCENT		29.07	16.47	5.98	.31	.84		52.68
AV LENGTH		506.29	552.16	521.77	529.33	555.50		523.32
STD ERROR		1.11	1.79	2.34	13.69	10.08		.89
SAMP SIZE	0	277	157	57	3	8	0	502
AV WEIGHT		2.21	2.78	2.31	3.22	2.99		2.42
STD ERROR		.04	.07	.05		.20		.03
SAMP SIZE	0	57	28	15	1	5	0	106
BOTH SEX	180	85,358	61,639	20,486	1,078	2,337	180	171,258
PERCENT	.11	49.84	35.99	11.96	.63	1.36	.11	100.00
AV LENGTH	538.00	514.74	563.94	530.63	542.17	564.08	630.00	535.34
STD ERROR		.91	1.38	1.61	12.98	8.44		.71
SAMP SIZE	1	475	343	114	6	13	1	953
AV WEIGHT		2.41	3.08	2.55	3.22	3.25		2.68
STD ERROR		.03	.05	.05		.23		.03
SAMP SIZE	0	103	76	35	1	7	0	222

Table 39. Wood River apportioned catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP							TOTAL
	31	32	42	43	52	53	63	
CATCH								
MALES								
NUMBER	1,017	419	714,916	0	295,777	240,887	11,630	1,264,646
PERCENT	.03	.01	23.62	.00	9.77	7.96	.38	41.78
FEMALES								
NUMBER	1,017	420	950,737	0	623,916	175,932	10,010	1,762,032
PERCENT	.03	.01	31.41	.00	20.61	5.81	.33	58.22
SEXES COMBINED								
NUMBER	2,034	839	1,665,653	0	919,693	416,819	21,640	3,026,678
PERCENT	.07	.03	55.03	.00	30.39	13.77	.71	100.00
ESCAPEMENT								
MALES								
NUMBER	0	0	278,650	792	58,611	117,502	3,371	458,926
PERCENT	.00	.00	20.47	.06	4.31	8.63	.25	33.72
FEMALES								
NUMBER	0	0	515,262	0	118,779	264,527	3,474	902,042
PERCENT	.00	.00	37.86	.00	8.73	19.44	.26	66.28
SEXES COMBINED								
NUMBER	0	0	793,912	792	177,390	382,029	6,845	1,360,968
PERCENT	.00	.00	58.33	.06	13.03	28.07	.50	100.00
CATCH AND ESCAPEMENT								
MALES								
NUMBER	1,017	419	993,566	792	354,388	358,389	15,001	1,723,572
PERCENT	.02	.01	22.64	.02	8.08	8.17	.34	39.28
FEMALES								
NUMBER	1,017	420	1,465,999	0	742,695	440,459	13,484	2,664,074
PERCENT	.02	.01	33.41	.00	16.93	10.04	.31	60.72
SEXES COMBINED								
NUMBER	2,034	839	2,459,565	792	1,097,083	798,848	28,485	4,387,646
PERCENT	.05	.02	56.06	.02	25.00	18.21	.65	100.00

Table 40. Wood River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 16	0	0	.00	.00
17	0	0	.00	.00
18	0	0	.00	.00
19	0	0	.00	.00
20	618	618	.05	.05
21	1,602	2,220	.12	.16
22	870	3,090	.06	.23
23	1,302	4,392	.10	.32
24	2,256	6,648	.17	.49
25	756	7,404	.06	.54
26	16,272	23,676	1.20	1.74
27	65,952	89,628	4.85	6.59
28	42,618	132,246	3.13	9.72
29	36,174	168,420	2.66	12.38
30	13,788	182,208	1.01	13.39
JULY 1	23,190	205,398	1.70	15.09
2	10,026	215,424	.74	15.83
3	299,970	515,394	22.04	37.87
4	599,454	1,114,848	44.05	81.92
5	94,944	1,209,792	6.98	88.89
6	14,838	1,224,630	1.09	89.98
7	13,266	1,237,896	.97	90.96
8	13,614	1,251,510	1.00	91.96
9	20,250	1,271,760	1.49	93.45
10	5,508	1,277,268	.40	93.85
11	3,222	1,280,490	.24	94.09
12	1,956	1,282,446	.14	94.23
13	2,352	1,284,798	.17	94.40
14	34,278	1,319,076	2.52	96.92
15	14,730	1,333,806	1.08	98.00
16	11,106	1,344,912	.82	98.82
17	6,666	1,351,578	.49	99.31
18	2,838	1,354,416	.21	99.52
19	3,720	1,358,136	.27	99.79
20	1,890	1,360,026	.14	99.93
21	804	1,360,830	.06	99.99
22	138	1,360,968	.01	100.00

Table 41. Wood River escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

SAMPLE PERIOD 1 6/16- 7/ 3						
	AGE GROUP					TOTAL
	42	43	52	53	63	
MALE	119,546	792	23,751	52,252	1,583	197,924
PERCENT	23.20	.15	4.61	10.14	.31	38.40
AV LENGTH	519.08	522.00	566.57	523.20	538.50	526.03
STD ERROR	2.08		5.08	3.11	4.50	1.62
SAMP SIZE	151	1	30	66	2	250
FEMALE	163,089	0	56,210	97,379	792	317,470
PERCENT	31.64		10.91	18.89	.15	61.60
AV LENGTH	498.38		540.46	502.90	575.00	507.41
STD ERROR	1.64		3.14	2.12		1.20
SAMP SIZE	206	0	71	123	1	401
BOTH SEX	282,635	792	79,961	149,631	2,375	515,394
PERCENT	54.84	.15	15.51	29.03	.46	100.00
AV LENGTH	507.14	522.00	548.22	509.99	550.67	514.56
STD ERROR	1.29		2.67	1.76	4.50	.97
SAMP SIZE	357	1	101	189	3	651
SAMPLE PERIOD 2 7/ 4- 7/22						
	AGE GROUP					TOTAL
	42	43	52	53	63	
MALE	159,104	0	34,860	65,250	1,788	261,002
PERCENT	18.82		4.12	7.72	.21	30.87
AV LENGTH	514.52		564.13	523.68	605.50	524.06
STD ERROR	1.93		3.90	3.05	84.50	1.60
SAMP SIZE	178	0	39	73	2	292
FEMALE	352,173	0	62,569	167,148	2,682	584,572
PERCENT	41.65		7.40	19.77	.32	69.13
AV LENGTH	489.69		536.69	494.31	531.00	496.23
STD ERROR	1.04		3.17	1.57	19.76	.85
SAMP SIZE	394	0	70	187	3	654
BOTH SEX	511,277	0	97,429	232,398	4,470	845,574
PERCENT	60.47		11.52	27.48	.53	100.00
AV LENGTH	497.42		546.51	502.56	560.80	504.82
STD ERROR	.93		2.47	1.42	35.82	.77
SAMP SIZE	572	0	109	260	5	946

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Table 41. Wood River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

ALL PERIODS COMBINED						
	AGE GROUP					TOTAL
	42	43	52	53	63	
MALE	278,650	792	58,611	117,502	3,371	458,926
PERCENT	20.47	.06	4.31	8.63	.25	33.72
AV LENGTH	516.48	522.00	565.12	523.47	574.04	524.91
STD ERROR	1.41		3.12	2.18	42.31	1.14
SAMP SIZE	329	1	69	139	4	542
FEMALE	515,262	0	118,779	264,527	3,474	902,042
PERCENT	37.86		8.73	19.44	.26	66.28
AV LENGTH	492.44		538.47	497.47	541.03	500.16
STD ERROR	.89		2.23	1.27	14.82	.70
SAMP SIZE	600	0	141	310	4	1,055
BOTH SEX	793,912	792	177,390	382,029	6,845	1,360,968
PERCENT	58.33	.06	13.03	28.07	.50	100.00
AV LENGTH	500.88	522.00	547.28	505.47	557.29	508.51
STD ERROR	.76		1.81	1.10	22.41	.60
SAMP SIZE	929	1	210	449	8	1,597

Table 42. Igushik River apportioned catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP								TOTAL
	31	32	41	42	52	53	62	63	
CATCH									
MALES									
NUMBER	135	56	2,292	101,222	122,931	15,806	2,966	963	246,371
PERCENT	.03	.01	.44	19.42	23.59	3.03	.57	.18	47.28
FEMALES									
NUMBER	135	55	1,146	134,353	125,562	7,329	4,806	1,340	274,726
PERCENT	.03	.01	.22	25.78	24.10	1.41	.92	.26	52.72
SEXES COMBINED									
NUMBER	270	111	3,438	235,575	248,493	23,135	7,772	2,303	521,097
PERCENT	.05	.02	.66	45.21	47.69	4.44	1.49	.44	100.00
ESCAPEMENT									
MALES									
NUMBER	0	0	93	39,453	24,360	7,710	93	279	71,988
PERCENT	.00	.00	.05	21.87	13.50	4.27	.05	.15	39.90
FEMALES									
NUMBER	0	0	0	72,814	23,904	11,020	247	465	108,450
PERCENT	.00	.00	.00	40.35	13.25	6.11	.14	.26	60.10
SEXES COMBINED									
NUMBER	0	0	93	112,267	48,264	18,730	340	744	180,438
PERCENT	.00	.00	.05	62.22	26.75	10.38	.19	.41	100.00
CATCH AND ESCAPEMENT									
MALES									
NUMBER	135	56	2,385	140,675	147,291	23,516	3,059	1,242	318,359
PERCENT	.02	.01	.34	20.05	21.00	3.35	.44	.18	45.38
FEMALES									
NUMBER	135	55	1,146	207,167	149,466	18,349	5,053	1,805	383,176
PERCENT	.02	.01	.16	29.53	21.31	2.62	.72	.26	54.62
SEXES COMBINED									
NUMBER	270	111	3,531	347,842	296,757	41,865	8,112	3,047	701,535
PERCENT	.04	.02	.50	49.58	42.30	5.97	1.16	.43	100.00

Note: Does not include 171,258 Igushik beach setnet commercial catch.

Table 43. Igushik River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 21	0	0	.00	.00
22	0	0	.00	.00
23	18	18	.01	.01
24	834	852	.46	.47
25	3,312	4,164	1.84	2.31
26	6,024	10,188	3.34	5.65
27	5,682	15,870	3.15	8.80
28	7,926	23,796	4.39	13.19
29	5,160	28,956	2.86	16.05
30	8,226	37,182	4.56	20.61
JULY 1	6,642	43,824	3.68	24.29
2	6,120	49,944	3.39	27.68
3	6,792	56,736	3.76	31.44
4	8,040	64,776	4.46	35.90
5	10,632	75,408	5.89	41.79
6	11,916	87,324	6.60	48.40
7	11,616	98,940	6.44	54.83
8	12,510	111,450	6.93	61.77
9	9,288	120,738	5.15	66.91
10	10,824	131,562	6.00	72.91
11	6,252	137,814	3.46	76.38
12	3,738	141,552	2.07	78.45
13	2,514	144,066	1.39	79.84
14	1,452	145,518	.80	80.65
15	4,944	150,462	2.74	83.39
16	7,680	158,142	4.26	87.64
17	3,612	161,754	2.00	89.65
18	4,302	166,056	2.38	92.03
19	2,460	168,516	1.36	93.39
20	2,346	170,862	1.30	94.69
21	2,982	173,844	1.65	96.35
22	1,746	175,590	.97	97.31
23	1,878	177,468	1.04	98.35
24	1,314	178,782	.73	99.08
25	1,176	179,958	.65	99.73
26	480	180,438	.27	100.00

Table 44. Igushik River escapement of sockeye salmon age, sex, and length (mm) by period, 1983.

SAMPLE PERIOD 1 6/21- 7/ 6							
	AGE GROUP						TOTAL
	41	42	52	53	62	63	
MALE	93	17,689	16,199	3,258	93	279	37,611
PERCENT	.11	20.26	18.55	3.73	.11	.32	43.07
AV LENGTH	445.00	535.44	587.06	549.29	564.00	573.00	559.00
STD ERROR		1.26	1.96	3.48		30.62	1.11
SAMP SIZE	1	190	174	35	1	3	404
FEMALE	0	27,556	17,968	3,724	0	465	49,713
PERCENT		31.56	20.58	4.26		.53	56.93
AV LENGTH		510.37	558.85	523.25		534.20	529.08
STD ERROR		1.25	1.47	2.57		15.09	.91
SAMP SIZE	0	296	193	40	0	5	534
BOTH SEX	93	45,245	34,167	6,982	93	744	87,324
PERCENT	.11	51.81	39.13	8.00	.11	.85	100.00
AV LENGTH	445.00	520.17	572.22	535.40	564.00	548.75	541.97
STD ERROR		.91	1.21	2.12		14.86	.70
SAMP SIZE	1	486	367	75	1	8	938
SAMPLE PERIOD 2 7/ 7- 7/26							
	AGE GROUP						TOTAL
	41	42	52	53	62	63	
MALE	0	21,764	8,161	4,452	0	0	34,377
PERCENT		23.37	8.76	4.78			36.92
AV LENGTH		532.93	576.47	542.28			544.48
STD ERROR		1.76	2.82	3.53			1.38
SAMP SIZE	0	176	66	36	0	0	278
FEMALE	0	45,258	5,936	7,296	247	0	58,737
PERCENT		48.60	6.37	7.84	.27		63.08
AV LENGTH		507.19	541.98	520.71	596.50		512.76
STD ERROR		.93	4.06	2.60	53.50		.92
SAMP SIZE	0	366	48	59	2	0	475
BOTH SEX	0	67,022	14,097	11,748	247	0	93,114
PERCENT		71.98	15.14	12.62	.27		100.00
AV LENGTH		515.55	561.95	528.88	596.50		524.47
STD ERROR		.85	2.36	2.10	53.50		.77
SAMP SIZE	0	542	114	95	2	0	753

-Continued-

Table 44. Igushik River escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

ALL PERIODS COMBINED							
	AGE GROUP						TOTAL
	41	42	52	53	62	63	
MALE	93	39,453	24,360	7,710	93	279	71,988
PERCENT	.05	21.87	13.50	4.27	.05	.15	39.90
AV LENGTH	445.00	534.06	583.51	545.24	564.00	573.00	552.06
STD ERROR		1.07	1.62	2.48		30.62	.86
SAMP SIZE	1	366	240	71	1	3	682
FEMALE	0	72,814	23,904	11,020	247	465	108,450
PERCENT		40.35	13.25	6.11	.14	.26	60.10
AV LENGTH		508.39	554.66	521.57	596.50	534.20	520.24
STD ERROR		.76	1.43	1.86	53.50	15.09	.65
SAMP SIZE	0	662	241	99	2	5	1,009
BOTH SEX	93	112,267	48,264	18,730	340	744	180,438
PERCENT	.05	62.22	26.75	10.38	.19	.41	100.00
AV LENGTH	445.00	517.41	569.22	531.31	587.61	548.75	532.94
STD ERROR		.62	1.08	1.50	35.67	14.86	.52
SAMP SIZE	1	1,028	481	170	3	8	1,691

Table 45. Nuyakuk River apportioned catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP							
	31	32	42	52	53	62	63	TOTAL
CATCH								
MALES								
NUMBER	238	98	191,248	509,654	3,696	86,279	9,333	800,546
PERCENT	.02	.01	13.65	36.39	.26	6.16	.67	57.15
FEMALES								
NUMBER	238	98	89,846	413,649	799	87,740	7,795	600,165
PERCENT	.02	.01	6.41	29.53	.06	6.26	.56	42.85
SEXES COMBINED								
NUMBER	476	196	281,094	923,303	4,495	174,019	17,128	1,400,711
PERCENT	.03	.01	20.07	65.92	.32	12.42	1.22	100.00
ESCAPEMENT								
MALES								
NUMBER	0	0	74,542	100,993	1,803	2,705	2,705	182,748
PERCENT	.00	.00	23.40	31.70	.57	.85	.85	57.36
FEMALES								
NUMBER	0	0	48,693	78,749	1,202	4,509	2,705	135,858
PERCENT	.00	.00	15.28	24.72	.38	1.42	.85	42.64
SEXES COMBINED								
NUMBER	0	0	123,235	179,742	3,005	7,214	5,410	318,606
PERCENT	.00	.00	38.68	56.42	.94	2.26	1.70	100.00
CATCH AND ESCAPEMENT								
MALES								
NUMBER	238	98	265,790	610,647	5,499	88,984	12,038	983,294
PERCENT	.01	.01	15.46	35.52	.32	5.18	.70	57.19
FEMALES								
NUMBER	238	98	138,539	492,398	2,001	92,249	10,500	736,023
PERCENT	.01	.01	8.06	28.64	.12	5.37	.61	42.81
SEXES COMBINED								
NUMBER	476	196	404,329	1,103,045	7,500	181,233	22,538	1,719,317
PERCENT	.03	.01	23.52	64.16	.44	10.54	1.31	100.00

Table 46. Nuyakuk River daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 30	0	0	.00	.00
JULY 1	0	0	.00	.00
2	22,920	22,920	7.19	7.19
3	27,078	49,998	8.50	15.69
4	17,046	67,044	5.35	21.04
5	12,054	79,098	3.78	24.83
6	7,026	86,124	2.21	27.03
7	22,212	108,336	6.97	34.00
8	66,474	174,810	20.86	54.87
9	54,462	229,272	17.09	71.96
10	41,346	270,618	12.98	84.94
11	21,462	292,080	6.74	91.67
12	13,056	305,136	4.10	95.77
13	4,698	309,834	1.47	97.25
14	3,972	313,806	1.25	98.49
15	2,154	315,960	.68	99.17
16	930	316,890	.29	99.46
17	522	317,412	.16	99.63
18	648	318,060	.20	99.83
19	546	318,606	.17	100.00

Note: Does not include 85,400 spawners in the Nushagak and Mulchatna Rivers.

Table 47. Nuyakuk River escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

SAMPLE PERIOD	AGE GROUP					TOTAL
	42	52	53	62	63	
6/30 - 7/19						
MALE	74,542	100,993	1,803	2,705	2,705	182,748
PERCENT	23.40	31.70	.57	.85	.85	57.36
AV LENGTH	500.81	575.55	529.83	587.33	583.22	544.90
STD ERROR	2.62	1.45	10.23	8.56	9.09	1.35
SAMP SIZE	248	336	6	9	9	608
FEMALE	48,693	78,749	1,202	4,509	2,705	135,858
PERCENT	15.28	24.72	.38	1.42	.85	42.64
AV LENGTH	496.94	549.61	500.25	578.60	574.11	531.75
STD ERROR	1.76	1.26	11.66	5.61	10.77	1.01
SAMP SIZE	162	262	4	15	9	452
BOTH SEX	123,235	179,742	3,005	7,214	5,410	318,606
PERCENT	38.68	56.42	.94	2.26	1.70	100.00
AV LENGTH	499.28	564.19	518.00	581.87	578.67	539.29
STD ERROR	1.73	.99	7.71	4.75	7.05	.89
SAMP SIZE	410	598	10	24	18	1,060

Table 48. Nushagak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg) by period, 1983.

	SAMPLE PERIOD 1 6/ 2- 6/15								
	AGE GROUP								
	32	42	52	53	62	63	72	73	TOTAL
MALE	0	932	4,312	0	22,956	0	1,049	0	29,249
PERCENT		1.43	6.62		35.24		1.61		44.90
AV LENGTH		560.00	746.30		847.92		961.00		827.82
STD ERROR		16.29	7.75		4.45		13.73		3.75
SAMP SIZE	0	8	37	0	197	0	9	0	251
AV WEIGHT		3.45	7.19		11.04		19.05		10.35
STD ERROR		.67	.37		.36		2.72		.30
SAMP SIZE	0	4	11	0	65	0	2	0	82
FEMALE	0	0	1,748	0	32,396	117	1,165	466	35,892
PERCENT			2.68		49.73	.18	1.79	.72	55.10
AV LENGTH			771.33		863.55	840.00	923.00	913.00	861.55
STD ERROR			18.49		2.58		15.15	13.09	2.56
SAMP SIZE	0	0	15	0	278	1	10	4	308
AV WEIGHT			8.30		11.30		11.86		11.25
STD ERROR			.32		.26		1.57		.25
SAMP SIZE	0	0	2	0	70	0	4	0	76
BOTH SEX	0	932	6,060	0	55,352	117	2,214	466	65,141
PERCENT		1.43	9.30		84.97	.18	3.40	.72	100.00
AV LENGTH		560.00	753.52		857.07	840.00	941.00	913.00	846.41
STD ERROR		16.29	7.67		2.39		10.29	13.09	2.20
SAMP SIZE	0	8	52	0	475	1	19	4	559
AV WEIGHT		3.45	7.36		11.17		14.26		10.78
STD ERROR		.67	.32		.22		1.38		.20
SAMP SIZE	0	4	13	0	135	0	6	0	158

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Table 48. Nushagak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

SAMPLE PERIOD 2 6/16- 6/28									
	AGE GROUP								TOTAL
	32	42	52	53	62	63	72	73	
MALE	86	16,266	6,677	342	4,623	0	342	86	28,422
PERCENT	.23	44.08	18.10	.93	12.53		.93	.23	77.03
AV LENGTH	570.00	551.84	608.87	547.50	863.74		1021.25	876.00	622.60
STD ERROR		2.61	7.53	35.03	8.68		34.89		2.79
SAMP SIZE	1	190	78	4	54	0	4	1	332
AV WEIGHT		2.75	3.55	1.27	10.16		18.91		4.37
STD ERROR		.13	.37		.78				.18
SAMP SIZE	0	49	16	1	14	0	1	0	81
FEMALE	0	86	342	0	7,362	0	599	86	8,475
PERCENT		.23	.93		19.95		1.62	.23	22.97
AV LENGTH		537.00	817.50		864.60		909.29	897.00	862.88
STD ERROR			22.46		4.36		23.28		4.31
SAMP SIZE	0	1	4	0	86	0	7	1	99
AV WEIGHT					10.17		12.38		10.27
STD ERROR					.38				.38
SAMP SIZE	0	0	0	0	21	0	1	0	22
BOTH SEX	86	16,352	7,019	342	11,985	0	941	172	36,897
PERCENT	.23	44.32	19.02	.93	32.48		2.55	.47	100.00
AV LENGTH	570.00	551.76	619.05	547.50	864.27		950.00	886.50	677.79
STD ERROR		2.61	7.24	35.03	4.29		19.50		2.37
SAMP SIZE	1	191	82	4	140	0	11	2	431
AV WEIGHT		2.75	3.55	1.27	10.17		15.65		5.63
STD ERROR		.13	.37		.39				.16
SAMP SIZE	0	49	16	1	35	0	2	0	103

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Table 48. Nushagak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 3 6/29- 7/15								TOTAL
	AGE GROUP								
	32	42	52	53	62	63	72	73	
MALE	119	13,426	5,131	60	6,086	0	239	0	25,061
PERCENT	.34	38.27	14.62	.17	17.35		.68		71.43
AV LENGTH	522.50	571.14	681.90	572.00	882.76		963.00		673.00
STD ERROR	32.50	3.60	10.71		8.49		4.68		3.59
SAMP SIZE	2	225	86	1	102	0	4	0	420
AV WEIGHT		2.91	4.71		11.50		14.85		5.63
STD ERROR		.09	.53		.76		.02		.22
SAMP SIZE	0	53	23	0	25	0	2	0	103
FEMALE	0	60	537	0	9,129	0	298	0	10,024
PERCENT		.17	1.53		26.02		.85		28.57
AV LENGTH		912.00	819.00		867.07		899.80		865.74
STD ERROR			8.97		3.77		7.67		3.49
SAMP SIZE	0	1	9	0	153	0	5	0	168
AV WEIGHT			9.02		10.60		10.97		10.50
STD ERROR			1.14		.32				.31
SAMP SIZE	0	0	3	0	38	0	1	0	42
BOTH SEX	119	13,486	5,668	60	15,215	0	537	0	35,085
PERCENT	.34	38.44	16.16	.17	43.37		1.53		100.00
AV LENGTH	522.50	572.65	694.89	572.00	873.35		927.89		728.07
STD ERROR	32.50	3.60	9.73		4.08		4.74		2.75
SAMP SIZE	2	226	95	1	255	0	9	0	588
AV WEIGHT		2.91	5.21		10.96		13.56		7.04
STD ERROR		.09	.49		.36		.02		.18
SAMP SIZE	0	53	26	0	63	0	3	0	145

-Continued-

Table 48. Nushagak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

ALL PERIODS COMBINED									
	AGE GROUP								TOTAL
	32	42	52	53	62	63	72	73	
MALE	205	30,624	16,120	402	33,665	0	1,630	86	82,732
PERCENT	.15	22.33	11.76	.29	24.55		1.19	.06	60.33
AV LENGTH	542.43	560.55	668.88	551.16	856.39		973.93	876.00	710.42
STD ERROR	21.67	2.26	5.62	28.02	3.74		11.02		1.99
SAMP SIZE	3	423	201	5	353	0	17	1	1,003
AV WEIGHT		2.84	4.89	1.27	11.00		18.40		6.88
STD ERROR		.08	.28		.31		1.09		.14
SAMP SIZE	0	106	50	1	104	0	5	0	266
FEMALE	0	146	2,627	0	48,887	117	2,062	552	54,391
PERCENT		.11	1.92		35.65	.09	1.50	.40	39.67
AV LENGTH		691.11	787.09		864.37	840.00	915.66	910.51	862.53
STD ERROR			10.81		1.92		10.26	10.47	1.85
SAMP SIZE	0	2	28	0	517	1	22	5	575
AV WEIGHT			8.47		11.00		11.88		10.92
STD ERROR			.69		.18		1.04		.17
SAMP SIZE	0	0	5	0	129	0	6	0	140
BOTH SEX	205	30,770	18,747	402	82,552	117	3,692	638	137,123
PERCENT	.15	22.44	13.67	.29	60.20	.09	2.69	.47	100.00
AV LENGTH	542.43	561.17	685.44	551.16	861.11	840.00	941.39	905.86	770.76
STD ERROR	21.67	2.25	5.11	28.02	1.90		7.52	8.73	1.43
SAMP SIZE	3	425	229	5	870	1	39	6	1,578
AV WEIGHT		2.84	5.34	1.27	11.00		14.76		8.47
STD ERROR		.08	.26		.17		.75		.11
SAMP SIZE	0	106	55	1	233	0	11	0	406

Table 49. Nushagak District escapement of chinook salmon sex, age, and length (mm), 1983.

SAMPLE PERIOD 8/1/83 - 8/13/83							
	AGE GROUP						TOTAL
	42	52	62	63	72	73	
MALE	15,958	13,015	41,310	113	1,132	113	71,641
PERCENT	9.87	8.05	25.54	.07	.70	.07	44.30
AV LENGTH	550.04	731.74	883.95	938.00	996.70	880.00	783.78
STD ERROR	4.94	10.26	3.85	.00	10.98	.00	3.11
SAMP SIZE	141	115	365	1	10	1	633
FEMALE	1,019	12,676	75,149	0	905	340	90,089
PERCENT	.63	7.84	46.47	.00	.56	.21	55.70
AV LENGTH	588.67	811.24	860.70	.00	896.25	893.33	851.14
STD ERROR	49.07	6.44	1.76	.00	13.95	15.90	1.82
SAMP SIZE	9	112	664	0	8	3	796
BOTH SEX	16,977	25,691	116,459	113	2,037	453	161,730
PERCENT	10.50	15.89	72.01	.07	1.26	.28	100.00
AV LENGTH	552.36	770.97	868.95	938.00	952.07	890.00	821.30
STD ERROR	5.49	6.09	1.78	.00	8.70	11.93	1.71
SAMP SIZE	150	227	1,029	1	18	4	1,429

Note: Escapement samples from Nushagak, Mulchatna, King Salmon, Stuyahok, and Kaktuli Rivers.

Escapement estimates from Muklung, Nushagak, and Mulchatna Rivers.

Table 50. Nushagak District commercial catch of chum salmon sex, age, length (mm), and weight (kg), 1983.

	SAMPLE PERIOD 1 5/23- 7/ 6					
	AGE GROUP					TOTAL
	31	41	42	51	61	
MALE	0	52,495	0	109,990	6,249	168,734
PERCENT		11.38		23.85	1.35	36.59
AV LENGTH		589.33		601.68	574.40	596.83
STD ERROR		3.37		3.16	17.72	2.40
SAMP SIZE	0	42	0	88	5	135
AV WEIGHT		3.70		4.19	3.03	4.04
STD ERROR		.19		.16		.13
SAMP SIZE	0	8	0	26	1	35
FEMALE	5,000	88,741	0	194,980	3,750	292,471
PERCENT	1.08	19.24		42.28	.81	63.41
AV LENGTH	539.25	554.83		575.78	574.67	568.78
STD ERROR	16.31	2.68		1.89	14.84	1.54
SAMP SIZE	4	71	0	156	3	234
AV WEIGHT		2.82		3.15		3.05
STD ERROR		.10		.08		.07
SAMP SIZE	0	17	0	37	0	54
BOTH SEX	5,000	141,236	0	304,970	9,999	461,205
PERCENT	1.08	30.62		66.12	2.17	100.00
AV LENGTH	539.25	567.65		585.12	574.50	579.04
STD ERROR	16.31	2.10		1.66	12.40	1.31
SAMP SIZE	4	113	0	244	8	369
AV WEIGHT		3.10		3.58	3.03	3.44
STD ERROR		.09		.08		.06
SAMP SIZE	0	25	0	63	1	89

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Table 50. Nushagak District commercial catch of chum salmon sex, age, length (mm), and weight (kg), 1983 (continued).

	SAMPLE PERIOD 2 7/ 7- 7/19					
	AGE GROUP					
	31	41	42	51	61	TOTAL
MALE	2,703	59,473	0	72,315	3,379	137,870
PERCENT	.88	19.26		23.41	1.09	44.64
AV LENGTH	545.75	594.42		602.08	593.20	597.45
STD ERROR	5.90	3.24		2.70	17.72	2.04
SAMP SIZE	4	88	0	107	5	204
AV WEIGHT		3.81		3.73	2.99	3.74
STD ERROR		.16		.12	.18	.09
SAMP SIZE	0	24	0	24	2	50
FEMALE	8,110	64,880	0	95,968	2,027	170,985
PERCENT	2.63	21.01		31.07	.66	55.36
AV LENGTH	529.08	557.33		571.64	582.67	564.32
STD ERROR	7.70	2.29		2.10	22.82	1.53
SAMP SIZE	12	96	0	142	3	253
AV WEIGHT	2.43	2.66		3.02		2.85
STD ERROR	.38	.07		.07		.05
SAMP SIZE	2	23	0	30	0	55
BOTH SEX	10,813	124,353	0	168,283	5,406	308,855
PERCENT	3.50	40.26		54.49	1.75	100.00
AV LENGTH	533.25	575.07		584.72	589.25	579.11
STD ERROR	5.96	1.96		1.67	14.00	1.25
SAMP SIZE	16	184	0	249	8	457
AV WEIGHT	2.43	3.25		3.34	2.99	3.27
STD ERROR	.38	.09		.07	.18	.05
SAMP SIZE	2	47	0	54	2	105

-Continued-

Table 50. Nushagak District commercial catch of chum salmon sex, age, length (mm), and weight (kg), 1983 (continued).

ALL PERIODS COMBINED					
	AGE GROUP				TOTAL
	31	41	51	61	
MALE	2,703	111,968	182,305	9,628	306,604
PERCENT	.35	14.54	23.67	1.25	39.82
AV LENGTH	545.75	592.03	601.84	581.00	597.11
STD ERROR	5.90	2.45	2.06	12.53	1.56
SAMP SIZE	4	130	195	10	339
AV WEIGHT		3.76	4.01	3.02	3.88
STD ERROR		.13	.10	.12	.08
SAMP SIZE	0	32	50	3	85
FEMALE	13,110	153,621	290,948	5,777	463,456
PERCENT	1.70	19.95	37.78	.75	60.18
AV LENGTH	532.96	555.89	574.41	577.48	567.14
STD ERROR	7.07	1.74	1.41	13.61	1.09
SAMP SIZE	16	167	298	6	487
AV WEIGHT	2.43	2.75	3.11		2.97
STD ERROR	.38	.06	.06		.04
SAMP SIZE	2	40	67	0	109
BOTH SEX	15,813	265,589	473,253	15,405	770,060
PERCENT	2.05	34.49	61.46	2.00	100.00
AV LENGTH	535.15	571.13	584.98	579.68	579.07
STD ERROR	5.78	1.45	1.18	9.35	.90
SAMP SIZE	20	297	493	16	826
AV WEIGHT	2.43	3.18	3.45	3.02	3.34
STD ERROR	.38	.07	.05	.12	.04
SAMP SIZE	2	72	117	3	194

Table 51. Nushagak River escapement of chum salmon sex, age, and length (mm), 1983.

SAMPLE PERIOD 7/1/83 - 7/16/83			
	AGE GROUP		TOTAL
	51	61	
MALE	31,596	76,734	108,330
PERCENT	19.27	46.79	66.05
AV LENGTH	625.95	652.02	644.42
STD ERROR	7.63	6.08	4.84
SAMP SIZE	21	51	72
FEMALE	12,037	43,633	55,670
PERCENT	7.34	26.61	33.95
AV LENGTH	561.38	607.17	597.27
STD ERROR	13.80	7.50	6.59
SAMP SIZE	8	29	37
BOTH SEX	43,633	120,367	164,000
PERCENT	26.61	73.39	100.00
AV LENGTH	608.14	635.76	628.41
STD ERROR	6.71	4.73	3.90
SAMP SIZE	29	80	109

Table 52. Togiak District commercial salmon catch by species and fishing effort by gear type, 1983.

period	hours	drift	Sockeye	Chinook	Chum	Pink	Coho	Total
June 6	15	1		9				9
7	24	5		48				48
8	24	2	2	26				28
9	24	2	5	24				29
10	24	2	2	12	1			15
11	9	1	1	12				13
13	15	2	8	41	1			50
14	24	39	50	781	59			890
15	24	53	188	981	113			1,282
16	24	59	134	1,007	117			1,258
17	24	18	100	354	48			502
18	9	1	3	27				30
20	15	35	390	1,856	165			2,411
21	24	84	2,021	3,980	973			6,974
22	24	69	2,093	2,230	1,300			5,623
23	24	66	2,851	1,822	1,281			5,954
24	24	46	2,221	1,313	986			4,520
25	9	3	447	233	159			839
27	15	19	2,438	1,121	740			4,299
28	24	93	11,127	3,585	6,684	3	1	21,400
29	24	83	9,565	2,087	7,140	4		18,796
30	24	92	10,264	1,755	7,232	4		19,255
July 1	24	78	10,404	1,642	6,639	1		18,686
2	9	10	2,705	218	1,835	3		4,761
4	24	56	14,636	2,866	6,317	3		23,822
5	24	79	24,673	2,227	11,489	10		38,399
6	24	90	27,909	1,230	13,443	9		42,591
7	24	71	18,193	1,054	9,845	8		29,100
8	24	45	13,078	424	3,120	13		16,635
9	9	10	1,835	30	1,918	3		3,786
11	15	80	15,617	389	15,553	2		31,561
12	24	119	29,648	614	27,958	16		58,236
13	24	121	31,161	481	27,722	10		59,374
14	24	141	37,937	412	24,229	8		62,586
15	24	100	33,846	468	11,492	4		45,810
16	24	37	18,385	199	4,590	8		23,182
17	24	48	18,551	96	7,827	1		26,475
18	24	144	41,854	437	20,373	5		62,669
19	24	175	36,991	321	18,872	18	47	56,249
20	24	186	34,303	333	17,973	21	29	52,659
21	24	179	26,101	300	13,476	3	27	39,907
22	24	154	23,378	287	10,521	12	1	34,199
23	24	87	13,130	128	5,410	4		18,672
24	24	26	6,272	65	2,212			8,549
25	24	86	11,444	69	6,328	2		17,843
26	24	94	10,009	105	5,631	3		15,748
27	24	82	10,503	164	4,186	2		14,855
28	24	81	11,729	118	5,091	8	1	16,947
29	9	26	4,816	100	1,311	13	1	6,241
August 1	15	22	1,672	42	1,711		1	3,426
2	24	36	3,158	59	2,695		2	5,914
3	24	26	2,730	37	1,613		7	4,387
4	24	22	2,505	48	1,555		8	4,116
5	24	6	1,296	19	576		1	1,892
9	24	4	449	16	221		26	712
10	24	6	480	21	410		34	945
11	24	11	605	32	457		71	1,165
12	24	6	228	9	97		28	362
15	15	18	198	17	139		170	524
16	24	9	665	27	274		192	1,158
17	24	7	237	15	139	1	153	545
18	24	8	168	7	117		214	506
19	24	6	119	8	61		299	487
22	15	4	33	2	14		85	134
23	24	7	93	6	31		397	527
24	24	10	151	14	45		710	920
25	24	7	78	7	49		173	307
26	24	13	56	8	39	2	1,011	1,116
27	9	1	5				38	43
29	15	10	65	5	14		422	506
30	24	4	28	1	8		224	261
31	24	10	82	8	24		416	530
September 1	24	9	53	3	23		245	324
2	24	5	36	5	19		677	737
total			588,208	38,497	322,691	204	5,711	955,311
percent of district catch			61.6	4.0	33.8	0.0	0.6	

Note: There were no setnet effort data available. Togiak River section open 4 days per week, all other sections open. There was continuous fishing for the entire district from 11 July.

Table 53. Togiak River catch and escapement of sockeye salmon by age group and sex, 1983.

	AGE GROUP							TOTAL
	41	42	51	52	53	62	63	
<b>CATCH</b>								
<b>MALES</b>								
NUMBER	477	91,034	235	134,384	31,357	1,657	4,150	263,294
PERCENT	.08	15.48	.04	22.85	5.33	.28	.71	44.76
<b>FEMALES</b>								
NUMBER	117	102,273	0	184,510	29,949	1,664	6,401	324,914
PERCENT	.02	17.39	.00	31.37	5.09	.28	1.09	55.24
<b>SEXES COMBINED</b>								
NUMBER	594	193,307	235	318,894	61,306	3,321	10,551	588,208
PERCENT	.10	32.86	.04	54.21	10.42	.56	1.79	100.00
<b>ESCAPEMENT</b>								
<b>MALES</b>								
NUMBER	133	30,419	0	42,254	2,515	0	716	76,037
PERCENT	.07	15.88	.00	22.06	1.31	.00	.37	39.70
<b>FEMALES</b>								
NUMBER	133	42,594	0	68,266	4,017	0	473	115,483
PERCENT	.07	22.24	.00	35.64	2.10	.00	.25	60.30
<b>SEXES COMBINED</b>								
NUMBER	266	73,013	0	110,520	6,532	0	1,189	191,520
PERCENT	.14	38.12	.00	57.71	3.41	.00	.62	100.00
<b>CATCH AND ESCAPEMENT</b>								
<b>MALES</b>								
NUMBER	610	121,453	235	176,638	33,872	1,657	4,866	339,331
PERCENT	.08	15.58	.03	22.65	4.34	.21	.62	43.52
<b>FEMALES</b>								
NUMBER	250	144,867	0	252,776	33,966	1,664	6,874	440,397
PERCENT	.03	18.58	.00	32.42	4.36	.21	.88	56.48
<b>SEXES COMBINED</b>								
NUMBER	860	266,320	235	429,414	67,838	3,321	11,740	779,728
PERCENT	.11	34.16	.03	55.07	8.70	.43	1.51	100.00

Note: Catch includes 55,906 from Kulukak section.  
Escapement does not include lower Togiak River, tributaries, and Kulukak estimates.

Table 54. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983.

	SAMPLE PERIOD 1 6/21- 7/ 5							TOTAL
	AGE GROUP							
	41	42	51	52	53	62	63	
MALE	0	11,602	0	22,383	1,406	234	586	36,211
PERCENT		12.04		23.24	1.46	.24	.61	37.59
AV LENGTH		532.77		586.77	546.58	634.50	593.40	568.32
STD ERROR		1.94		1.62	11.17	.50	14.06	1.28
SAMP SIZE	0	99	0	191	12	2	5	309
AV WEIGHT		2.77		3.64	3.17		3.20	3.38
STD ERROR		.08		.07	.17			.06
SAMP SIZE	0	21	0	52	3	0	1	77
FEMALE	117	12,070	0	45,352	1,172	234	1,172	60,117
PERCENT	.12	12.53		47.08	1.22	.24	1.22	62.41
AV LENGTH	515.00	520.89		554.66	535.40	570.50	551.80	547.43
STD ERROR		1.96		1.04	6.13	14.50	6.83	.90
SAMP SIZE	1	103	0	387	10	2	10	513
AV WEIGHT		2.38		2.95	2.43			2.82
STD ERROR		.04		.03	.09			.03
SAMP SIZE	0	28	0	100	3	0	0	131
BOTH SEX	117	23,672	0	67,735	2,578	468	1,758	96,328
PERCENT	.12	24.57		70.32	2.68	.49	1.83	100.00
AV LENGTH	515.00	526.71		565.27	541.50	602.50	565.67	555.29
STD ERROR		1.38		.88	6.70	7.26	6.54	.74
SAMP SIZE	1	202	0	578	22	4	15	822
AV WEIGHT		2.55		3.19	2.80		3.20	3.02
STD ERROR		.04		.03	.09			.03
SAMP SIZE	0	49	0	152	6	0	1	208

-Continued-

Table 54. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 2 7/ 6- 7/14							TOTAL
	AGE GROUP							
	41	42	51	52	53	62	63	
MALE	0	26,999	235	48,129	5,165	470	704	81,702
PERCENT		15.39	.13	27.44	2.95	.27	.40	46.59
AV LENGTH		538.30	589.00	584.95	553.86	592.50	586.33	567.64
STD ERROR		1.76		1.57	4.48	21.50	17.29	1.15
SAMP SIZE	0	115	1	205	22	2	3	348
AV WEIGHT		2.81		3.60	3.44	4.10	4.30	3.37
STD ERROR		.07		.07	.20			.05
SAMP SIZE	0	25	0	51	3	1	1	81
FEMALE	0	23,947	0	64,799	3,991	0	939	93,676
PERCENT		13.65		36.95	2.28		.54	53.41
AV LENGTH		517.43		559.88	537.47		574.75	548.22
STD ERROR		1.83		1.27	3.65		6.95	1.01
SAMP SIZE	0	102	0	276	17	0	4	399
AV WEIGHT		2.31		2.83	2.57		3.10	2.71
STD ERROR		.06		.04	.13			.03
SAMP SIZE	0	23	0	77	6	0	1	107
BOTH SEX	0	50,946	235	112,928	9,156	470	1,643	175,378
PERCENT		29.05	.13	64.39	5.22	.27	.94	100.00
AV LENGTH		528.49	589.00	570.56	546.72	592.50	579.71	557.27
STD ERROR		1.27		.99	2.99	21.50	8.40	.76
SAMP SIZE	0	217	1	481	39	2	7	747
AV WEIGHT		2.57		3.14	2.86	4.10	3.70	2.99
STD ERROR		.05		.04	.11			.03
SAMP SIZE	0	48	0	128	9	1	2	188

-Continued-

Table 54. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

	SAMPLE PERIOD 3 7/15- 7/28							TOTAL
	AGE GROUP							
	41	42	51	52	53	62	63	
MALE	477	52,433	0	63,872	24,786	953	2,860	145,381
PERCENT	.15	16.57		20.18	7.83	.30	.90	45.93
AV LENGTH	560.00	544.64		594.33	548.21	608.50	596.00	568.56
STD ERROR		1.54		1.75	2.47	12.50	8.35	1.06
SAMP SIZE	1	110	0	134	52	2	6	305
AV WEIGHT	2.94	3.00		3.91	3.08	4.32	3.81	3.48
STD ERROR		.06		.08	.12	.06	.54	.05
SAMP SIZE	1	23	0	35	15	2	2	78
FEMALE	0	66,256	0	74,359	24,786	1,430	4,290	171,121
PERCENT		20.93		23.49	7.83	.45	1.36	54.07
AV LENGTH		517.10		563.47	526.83	581.33	559.44	540.26
STD ERROR		1.47		1.57	2.16	1.45	8.96	.97
SAMP SIZE	0	139	0	156	52	3	9	359
AV WEIGHT		2.32		3.06	2.32		2.60	2.58
STD ERROR		.03		.07	.06		.16	.03
SAMP SIZE	0	43	0	31	14	0	3	91
BOTH SEX	477	118,689	0	138,231	49,572	2,383	7,150	316,502
PERCENT	.15	37.50		43.67	15.66	.75	2.26	100.00
AV LENGTH	560.00	529.27		577.73	537.52	592.20	574.06	553.26
STD ERROR		1.07		1.17	1.64	5.08	6.33	.71
SAMP SIZE	1	249	0	290	104	5	15	664
AV WEIGHT	2.94	2.56		3.51	2.71	4.32	3.08	2.99
STD ERROR		.03		.06	.07	.06	.24	.03
SAMP SIZE	1	66	0	66	29	2	5	169

-Continued-

Table 54. Togiak District commercial catch of sockeye salmon sex, age, length (mm), and weight (kg) by period, 1983 (continued).

ALL PERIODS COMBINED								
	AGE GROUP							TOTAL
	41	42	51	52	53	62	63	
MALE	477	91,034	235	134,384	31,357	1,657	4,150	263,294
PERCENT	.08	15.48	.04	22.85	5.33	.28	.71	44.76
AV LENGTH	560.00	541.25	589.00	589.71	549.07	607.63	593.99	568.24
STD ERROR		1.01		.95	2.44	8.29	7.19	.67
SAMP SIZE	1	324	1	530	86	6	14	962
AV WEIGHT	2.94	2.91		3.75	3.14	4.25	3.81	3.39
STD ERROR		.04		.04	.09	.04	.27	.03
SAMP SIZE	1	69	0	138	21	3	4	236
FEMALE	117	102,273	0	184,510	29,949	1,664	6,401	324,914
PERCENT	.02	17.39		31.37	5.09	.28	1.09	55.24
AV LENGTH	515.00	517.62		560.04	528.58	579.81	560.29	543.88
STD ERROR		1.00		.72	1.80	5.87	4.75	.55
SAMP SIZE	1	344	0	819	79	5	23	1,271
AV WEIGHT		2.32		2.95	2.36		2.69	2.69
STD ERROR		.02		.02	.05		.12	.02
SAMP SIZE	0	94	0	208	23	0	4	329
BOTH SEX	594	193,307	235	318,894	61,306	3,321	10,551	588,208
PERCENT	.10	32.86	.04	54.21	10.42	.56	1.79	100.00
AV LENGTH	551.14	528.75	589.00	572.55	539.06	593.69	573.54	554.78
STD ERROR		.71		.57	1.54	5.25	4.02	.43
SAMP SIZE	2	668	1	1,349	165	11	37	2,233
AV WEIGHT	2.94	2.60		3.29	2.76	4.25	3.18	3.01
STD ERROR		.02		.02	.05	.04	.15	.02
SAMP SIZE	1	163	0	346	44	3	8	565

Note: Includes 55,906 catch in Kulukak section.

Table 55. Togiak Lake daily sockeye salmon escapement counts, 1983.

DATE	DAILY COUNT	ACCUMULATIVE COUNT	DAILY PERCENT OF TOTAL	ACCUMULATIVE PERCENT
JUNE 26	36	36	.02	.02
27	0	36	.00	.02
28	0	36	.00	.02
29	0	36	.00	.02
30	606	642	.32	.34
JULY 1	2,394	3,036	1.25	1.59
2	4,386	7,422	2.29	3.88
3	2,964	10,386	1.55	5.42
4	1,452	11,838	.76	6.18
5	2,574	14,412	1.34	7.53
6	5,136	19,548	2.68	10.21
7	6,054	25,602	3.16	13.37
8	6,486	32,088	3.39	16.75
9	5,076	37,164	2.65	19.40
10	5,178	42,342	2.70	22.11
11	5,364	47,706	2.80	24.91
12	8,928	56,634	4.66	29.57
13	14,856	71,490	7.76	37.33
14	17,274	88,764	9.02	46.35
15	10,662	99,426	5.57	51.91
16	5,874	105,300	3.07	54.98
17	5,628	110,928	2.94	57.92
18	3,384	114,312	1.77	59.69
19	5,646	119,958	2.95	62.63
20	7,422	127,380	3.88	66.51
21	6,360	133,740	3.32	69.83
22	5,256	138,996	2.74	72.58
23	3,204	142,200	1.67	74.25
24	1,578	143,778	.82	75.07
25	2,022	145,800	1.06	76.13
26	4,326	150,126	2.26	78.39
27	3,528	153,654	1.84	80.23
28	3,492	157,146	1.82	82.05
29	3,600	160,746	1.88	83.93
30	5,220	165,966	2.73	86.66
31	3,492	169,458	1.82	88.48
AUG 1	4,374	173,832	2.28	90.76
2	4,422	178,254	2.31	93.07
3	4,902	183,156	2.56	95.63
4	4,224	187,380	2.21	97.84
5	2,592	189,972	1.35	99.19
6	1,206	191,178	.63	99.82
7	342	191,520	.18	100.00

Table 56. Togiak Lake escapement of sockeye salmon sex, age, and length (mm) by period, 1983.

SAMPLE PERIOD 1 6/26- 7/11						
	AGE GROUP					
	41	42	52	53	63	TOTAL
MALE	0	5,120	10,626	388	78	16,212
PERCENT		10.73	22.27	.81	.16	33.98
AV LENGTH		549.82	594.90	557.80	583.00	579.72
STD ERROR		2.24	1.96	6.30		1.48
SAMP SIZE	0	66	137	5	1	209
FEMALE	0	8,688	21,720	853	233	31,494
PERCENT		18.21	45.53	1.79	.49	66.02
AV LENGTH		527.79	568.81	540.91	579.67	556.82
STD ERROR		2.00	1.15	4.32	6.69	.97
SAMP SIZE	0	112	280	11	3	406
BOTH SEX	0	13,808	32,346	1,241	311	47,706
PERCENT		28.94	67.80	2.60	.65	100.00
AV LENGTH		535.96	577.38	546.19	580.50	564.60
STD ERROR		1.51	1.00	3.56	6.69	.82
SAMP SIZE	0	178	417	16	4	615
SAMPLE PERIOD 2 7/12- 7/17						
	AGE GROUP					
	41	42	52	53	63	TOTAL
MALE	0	8,437	15,164	534	107	24,242
PERCENT		13.35	23.99	.84	.17	38.34
AV LENGTH		547.34	599.86	564.40	617.00	580.88
STD ERROR		2.57	2.07	8.15		1.59
SAMP SIZE	0	79	142	5	1	227
FEMALE	0	13,990	24,242	641	107	38,980
PERCENT		22.13	38.34	1.01	.17	61.66
AV LENGTH		516.82	568.22	555.67	564.00	549.55
STD ERROR		2.29	1.36	10.90		1.20
SAMP SIZE	0	131	227	6	1	365
BOTH SEX	0	22,427	39,406	1,175	214	63,222
PERCENT		35.47	62.33	1.86	.34	100.00
AV LENGTH		528.30	580.40	559.64	590.50	561.56
STD ERROR		1.73	1.16	7.00		.96
SAMP SIZE	0	210	369	11	2	592

-Continued-

Table 56. Togiak Lake escapement of sockeye salmon sex, age, and length (mm) by period, 1983 (continued).

SAMPLE PERIOD 3 7/18- 8/ 7						
	AGE GROUP					TOTAL
	41	42	52	53	63	
MALE	133	16,862	16,464	1,593	531	35,583
PERCENT	.17	20.92	20.43	1.98	.66	44.15
AV LENGTH	597.00	549.49	601.44	548.58	609.25	574.56
STD ERROR		2.16	1.80	5.17	9.93	1.35
SAMP SIZE	1	127	124	12	4	268
FEMALE	133	19,916	22,304	2,523	133	45,009
PERCENT	.17	24.71	27.68	3.13	.17	55.85
AV LENGTH	555.00	525.13	568.78	525.00	545.00	546.90
STD ERROR		1.58	1.55	6.11		1.10
SAMP SIZE	1	150	168	19	1	339
BOTH SEX	266	36,778	38,768	4,116	664	80,592
PERCENT	.33	45.63	48.10	5.11	.82	100.00
AV LENGTH	576.00	536.30	582.65	534.13	596.40	559.11
STD ERROR		1.31	1.18	4.25	9.93	.86
SAMP SIZE	2	277	292	31	5	607
ALL PERIODS COMBINED						
	AGE GROUP					TOTAL
	41	42	52	53	63	
MALE	133	30,419	42,254	2,515	716	76,037
PERCENT	.07	15.88	22.06	1.31	.37	39.70
AV LENGTH	597.00	548.95	599.23	553.36	607.55	577.67
STD ERROR		1.37	1.13	3.67	6.62	.85
SAMP SIZE	1	272	403	22	6	704
FEMALE	133	42,594	68,266	4,017	473	115,483
PERCENT	.07	22.24	35.64	2.10	.25	60.30
AV LENGTH	555.00	522.94	568.59	533.27	566.38	550.50
STD ERROR		1.13	.76	3.93	4.01	.63
SAMP SIZE	1	393	675	36	5	1,110
BOTH SEX	266	73,013	110,520	6,532	1,189	191,520
PERCENT	.14	38.12	57.71	3.41	.62	100.00
AV LENGTH	576.00	533.78	580.30	541.01	591.17	561.29
STD ERROR		.87	.64	2.81	4.05	.50
SAMP SIZE	2	665	1,078	58	11	1,814

Note: Tower counts only. Does not include lower river, tributaries, or Kulukak estimates.

Table 57. Togiak District commercial catch of chinook salmon sex, age, length (mm), and weight (kg), 1983.

	SAMPLE PERIOD 6/20/83 - 7/15/83				
	AGE GROUP				TOTAL
	42	52	62	72	
MALE	9,645	3,690	9,898	419	23,652
PERCENT	25.05	9.59	25.71	1.09	61.44
AV LENGTH	541.88	673.66	858.98	945.80	702.30
STD ERROR	4.05	13.92	8.63	36.60	4.57
SAMP SIZE	115	44	118	5	282
AV WEIGHT	2.94	4.65	12.61	16.34	7.49
STD ERROR	.13	.40	.68	1.15	.29
SAMP SIZE	33	17	36	4	90
FEMALE	84	1,090	12,916	755	14,845
PERCENT	.22	2.83	33.55	1.96	38.56
AV LENGTH	538.00	810.00	853.03	883.89	849.66
STD ERROR		9.24	4.49	17.00	4.06
SAMP SIZE	1	13	154	9	177
AV WEIGHT	2.94	9.84	11.09	12.00	11.00
STD ERROR		.45	.30	2.21	.28
SAMP SIZE	1	6	62	3	72
BOTH SEX	9,729	4,780	22,814	1,174	38,497
PERCENT	25.27	12.42	59.26	3.05	100.00
AV LENGTH	541.85	704.75	855.61	905.99	759.12
STD ERROR	4.02	10.95	4.53	17.04	3.22
SAMP SIZE	116	57	272	14	459
AV WEIGHT	2.94	5.83	11.75	13.55	8.84
STD ERROR	.13	.31	.31	1.15	.20
SAMP SIZE	34	23	98	7	162

Table 58. Togiak District escapement of chinook salmon sex, age, length (mm), 1983.

SAMPLE PERIOD	8/3/83 - 8/27/83					
	AGE GROUP					TOTAL
	42	52	62	72	73	
MALE	147	1,469	8,962	294	0	10,872
PERCENT	.67	6.71	40.94	1.34		49.67
AV LENGTH	521.00	765.30	872.15	978.00		855.83
STD ERROR		48.86	10.33	51.00		10.86
SAMP SIZE	1	10	61	2	0	74
FEMALE	147	1,175	9,402	147	147	11,018
PERCENT	.67	5.37	42.95	.67	.67	50.33
AV LENGTH	597.00	782.75	855.94	934.00	851.00	845.66
STD ERROR		16.54	8.99			7.87
SAMP SIZE	1	8	64	1	1	75
BOTH SEX	294	2,644	18,364	441	147	21,890
PERCENT	1.34	12.08	83.89	2.01	.67	100.00
AV LENGTH	559.00	773.05	863.85	963.33	851.00	850.71
STD ERROR		28.12	6.83	34.00		6.69
SAMP SIZE	2	18	125	3	1	149

Note: Escapement samples from Togiak and Gechiak Rivers.

Table 59. Togiak District commercial catch of chum salmon sex, age, length (mm), and weight (kg), 1983.

SAMPLE PERIOD	AGE GROUP				TOTAL
	31	41	51	61	
6/28/83 - 7/28/83					
MALE	3,533	74,784	39,453	589	118,359
PERCENT	1.09	23.18	12.23	.18	36.68
AV LENGTH	548.75	599.22	610.01	605.00	601.34
STD ERROR	5.98	1.98	2.73	27.00	1.56
SAMP SIZE	12	254	134	2	402
AV WEIGHT	3.31	4.01	4.01	4.53	3.99
STD ERROR		.09	.15		.07
SAMP SIZE	1	74	25	1	101
FEMALE	3,828	133,669	65,068	1,767	204,332
PERCENT	1.19	41.42	20.16	.55	63.32
AV LENGTH	536.08	566.20	580.76	576.00	570.36
STD ERROR	10.03	1.12	1.90	8.12	.97
SAMP SIZE	13	454	221	6	694
AV WEIGHT	2.33	3.01	3.28	2.58	3.08
STD ERROR	.13	.04	.07		.03
SAMP SIZE	4	116	53	1	174
BOTH SEX	7,361	208,453	104,521	2,356	322,691
PERCENT	2.28	64.60	32.39	.73	100.00
AV LENGTH	542.16	578.05	591.80	583.25	581.72
STD ERROR	5.95	1.01	1.57	9.09	.84
SAMP SIZE	25	708	355	8	1,096
AV WEIGHT	2.80	3.37	3.56	3.07	3.41
STD ERROR	.10	.04	.07		.03
SAMP SIZE	5	190	78	2	275

Table 60. Togiak River escapement of chum salmon by age, sex, and period with length (mm) and weight (kg), 1983.

SAMPLE PERIOD	8/1/83 - 8/5/83			
	AGE GROUP			TOTAL
	41	51	61	
MALES	7,835	82,924	26,117	116,876
PERCENT	4.76	50.40	15.87	71.03
AV LENGTH	585.92	624.87	642.60	626.22
STD ERROR	8.29	2.69	3.65	2.15
SAMP SIZE	12	127	40	179
FEMALES	5,876	37,217	4,571	47,664
PERCENT	3.57	22.62	2.78	28.97
AV LENGTH	574.22	583.53	593.43	583.33
STD ERROR	8.98	3.43	4.24	2.93
SAMP SIZE	9	57	7	73
BOTH SEX	13,711	120,141	30,688	164,540
PERCENT	8.33	73.02	18.65	100.00
AV LENGTH	580.91	612.06	635.28	613.80
STD ERROR	6.10	2.14	3.17	1.75
SAMP SIZE	21	184	47	252

## LITERATURE CITED

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APPENDICES

Appendix Table 1. Japanese mothership fishery catch of 2-ocean sockeye salmon of Bristol Bay origin by year of maturity, 1957 to 1983.

YEAR	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
1957													
MATURING :	38	13172	310646	0	3450277	1352760	2608	1300843	1048	2122	10486	0	6444000
IMMATURE :	0	2494	0	0	653309	0	494	246315	0	402	1986	0	905000
TOTAL :	38	15666	310646	0	4103586	1352760	3102	1547158	1048	2524	12472	0	7349000
1958													
MATURING :	0	519	100753	89	78605	96268	1053	86477	1426	159	651	0	366000
IMMATURE :	0	34	0	6	5160	0	69	5678	0	10	43	0	11000
TOTAL :	0	553	100753	95	83765	96268	1122	92155	1426	169	694	0	377000
1959													
MATURING :	273	1387	209929	0	43327	257941	245	38702	12720	126	350	0	565000
IMMATURE :	0	544	0	0	16994	0	96	15180	0	49	137	0	33000
TOTAL :	273	1931	209929	0	60321	257941	341	53882	12720	175	487	0	598000
1960													
MATURING :	741	4328	3001953	65	266131	211984	88	143814	9403	182	1311	0	3640000
IMMATURE :	0	905	0	14	55669	0	18	30082	0	38	274	0	87000
TOTAL :	741	5233	3001953	79	321800	211984	106	173896	9403	220	1585	0	3727000
1961													
MATURING :	119	6310	136348	0	3502272	1821951	1203	317933	6668	3421	18558	4217	5819000
IMMATURE :	0	508	0	0	281714	0	97	25574	0	275	1493	339	310000
TOTAL :	119	6818	136348	0	3783986	1821951	1300	343507	6668	3696	20051	4556	6129000
1962													
MATURING :	26	158	192145	0	77884	391065	1742	168826	278	356	520	0	833000
IMMATURE :	0	81	0	0	39647	0	887	85939	0	181	265	0	127000
TOTAL :	26	239	192145	0	117531	391065	2629	254765	278	537	785	0	960000
1963													
MATURING :	1492	6017	266168	0	155668	253633	506	234622	9402	31	1461	0	929000
IMMATURE :	0	1088	0	0	28139	0	91	42412	0	6	264	0	72000
TOTAL :	1492	7105	266168	0	183807	253633	597	277034	9402	37	1725	0	1001000
1964													
MATURING :	64	259	132651	3	36451	66717	13	15874	434	0	1534	0	254000
IMMATURE :	0	287	0	3	40402	0	14	17594	0	0	1700	0	60000
TOTAL :	64	546	132651	6	76853	66717	27	33468	434	0	3234	0	314000
1965													
MATURING :	69	4976	142453	0	347150	5474695	106	128311	1495	0	745	0	6100000
IMMATURE :	0	8716	0	0	608051	0	185	224743	0	0	1305	0	843000
TOTAL :	69	13692	142453	0	955201	5474695	291	353054	1495	0	2050	0	6943000
1966													
MATURING :	14	1571	116290	78	299145	263701	280	842894	4792	36	2199	0	1531000
IMMATURE :	0	554	0	28	105439	0	99	297092	0	13	775	0	404000
TOTAL :	14	2125	116290	106	404584	263701	379	1139986	4792	49	2974	0	1935000

-Continued-

Appendix Table 1. Japanese mothership fishery catch of 2-ocean sockeye salmon of Bristol Bay origin by year of maturity, 1957 to 1983 (continued).

YEAR	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
1967													
MATURING :	134	2350	95405	140	107675	480638	625	171975	2503	126	4429	0	866000
IMMATURE :	0	458	0	27	20986	0	122	33519	0	25	863	0	56000
TOTAL :	134	2808	95405	167	128661	480638	747	205494	2503	151	5292	0	922000
1968													
MATURING :	336	2076	337722	125	184247	212012	884	119596	5100	64	1838	0	864000
IMMATURE :	0	141	0	9	12529	0	60	8132	0	4	125	0	21000
TOTAL :	336	2217	337722	134	196776	212012	944	127728	5100	68	1963	0	885000
1969													
MATURING :	325	758	463404	0	50218	229371	33	42566	3409	0	916	0	791000
IMMATURE :	0	9944	0	0	659007	0	437	558591	0	0	12021	0	1240000
TOTAL :	325	10702	463404	0	709225	229371	470	601157	3409	0	12937	0	2031000
1970													
MATURING :	184	5242	298284	0	233396	2820623	0	84946	7230	0	1095	0	3451000
IMMATURE :	0	8348	0	0	371645	0	0	135263	0	0	1744	0	517000
TOTAL :	184	13590	298284	0	605041	2820623	0	220209	7230	0	2839	0	3968000
1971													
MATURING :	206	2140	84009	0	361452	255790	557	136849	495	0	502	0	842000
IMMATURE :	0	5152	0	0	869934	0	1340	329366	0	0	1208	0	1207000
TOTAL :	206	7292	84009	0	1231386	255790	1897	466215	495	0	1710	0	2049000
1972													
MATURING :	204	784	133988	6	162096	223043	1185	185582	821	148	2143	0	710000
IMMATURE :	0	1319	0	9	272660	0	1994	312165	0	249	3604	0	592000
TOTAL :	204	2103	133988	15	434756	223043	3179	497747	821	397	5747	0	1302000
1973													
MATURING :	130	22136	56621	1515	261334	55583	1425	223411	329	418	2098	0	625000
IMMATURE :	0	9246	0	633	109158	0	595	93317	0	175	876	0	214000
TOTAL :	130	31382	56621	2148	370492	55583	2020	316728	329	593	2974	0	839000
1974													
MATURING :	93	235	46344	116	32015	157246	427	14334	107	38	45	0	251000
IMMATURE :	0	1292	0	635	175641	0	2341	78636	0	210	245	0	259000
TOTAL :	93	1527	46344	751	207656	157246	2768	92970	107	248	290	0	510000
1975													
MATURING :	74	909	41021	0	59316	461402	422	73594	7865	119	278	0	645000
IMMATURE :	0	4779	0	0	311918	0	2219	386999	0	624	1461	0	708000
TOTAL :	74	5688	41021	0	371234	461402	2641	460593	7865	743	1739	0	1353000
1976													
MATURING :	122	3518	105567	0	173665	356244	232	99609	32306	110	7627	0	779000
IMMATURE :	0	2742	0	0	135390	0	181	77655	0	86	5946	0	222000
TOTAL :	122	6260	105567	0	309055	356244	413	177264	32306	196	13573	0	1001000

-Continued-

Appendix Table 1. Japanese mothership fishery catch of 2-ocean sockeye salmon of Bristol Bay origin by year of maturity, 1957 to 1983 (continued).

YEAR	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
1977													
MATURING :	132	3354	90183	358	100162	160733	177	179098	4096	23	1684	0	540000
IMMATURE :	0	2684	0	287	80170	0	142	143351	0	18	1348	0	228000
TOTAL :	132	6038	90183	645	180332	160733	319	322449	4096	41	3032	0	768000
1978													
MATURING :	127	95	67062	29	30947	9605	863	14438	363	81	390	0	124000
IMMATURE :	0	667	0	202	216695	0	6040	101098	0	564	2734	0	328000
TOTAL :	127	762	67062	231	247642	9605	6903	115536	363	645	3124	0	452000
1979													
MATURING :	6	29	18998	0	8905	36378	16	3513	118	0	37	0	68000
IMMATURE :	0	539	0	3	168115	0	301	66329	0	0	705	8	236000
TOTAL :	6	568	18998	3	177020	36378	317	69842	118	0	742	8	304000
1980													
MATURING :	25	144	35013	0	39013	99223	59	6278	234	0	11	0	180000
IMMATURE :	0	1296	0	0	351502	0	534	56568	0	0	100	0	410000
TOTAL :	25	1440	35013	0	390515	99223	593	62846	234	0	111	0	590000
1981													
MATURING :	0	206	22710	0	54991	40911	41	18012	78	3	48	0	137000
IMMATURE :	0	1917	0	4	510882	0	383	167341	0	23	450	0	681000
TOTAL :	0	2123	22710	4	565873	40911	424	185353	78	26	498	0	818000
1982													
MATURING :	8	36	11947	2	36909	3446	399	10215	0	35	3	0	63000
IMMATURE :	0	286	0	13	294660	0	3188	81552	0	279	22	0	380000
TOTAL :	8	322	11947	15	331569	3446	3587	91767	0	314	25	0	443000
1983													
MATURING :	6	22	58443	0	13913	20150	592	2689	122	53	10	0	96000
IMMATURE :	0	290	0	6	183586	0	7810	35483	0	699	126	0	228000
TOTAL :	6	312	58443	6	197499	20150	8402	38172	122	752	136	0	324000

Appendix Table 2. South Peninsula June sockeye (interception) fishery catch by age class, 1956 to 1983.

YEAR	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	total
56	0	0	307	171421	0	207	46548	82096	0	28	28577	952	0	213	0	330349
57	1	1	336	7917	0	0	87928	34474	0	66	33151	27	54	267	0	164222
58	0	36	190	36837	1037	32	28739	35196	114	385	31617	521	58	238	0	135000
59	38	197	192	29043	100	0	5994	35686	0	34	5354	1760	17	48	0	78463
60	32	11	185	128250	443	3	11370	9057	35	4	6144	402	8	56	0	156000
61	5	34	275	5950	28	0	152839	79509	0	52	13874	291	149	810	184	254000
62	10	18	62	75129	267	0	30453	152907	11	681	66011	109	139	203	0	326000
63	238	173	961	42526	405	0	24870	40522	0	81	37484	1502	5	233	0	149000
64	61	253	244	125279	3850	3	34426	63010	11	12	14992	410	0	1449	0	244000
65	9	304	632	18089	88	0	44083	695203	0	13	16294	190	0	95	0	775000
66	5	0	597	44183	310	30	113657	100191	0	106	320250	1821	14	836	0	582000
67	39	393	690	28009	367	41	31611	141107	0	183	50488	735	37	1300	0	255000
68	219	2522	1351	219875	9894	82	119955	138031	75	575	77863	3320	41	1197	0	575000
69	1673	0	1120	517417	0	0	54813	245493	0	0	33770	1693	0	1021	0	857000
70	0	0	1071	142544	0	0	146131	1345170	0	0	43270	3209	0	1605	0	1683000
71	0	0	0	156994	0	0	221420	160930	0	0	61903	0	0	8753	0	610000
72	149	13	573	97941	0	4	118487	163039	0	866	135654	600	108	1566	0	519000
73	0	20	6452	12560	469	0	162010	8490	0	0	71680	0	0	319	0	262000
74	22	15	56	11015	327	28	7609	37375	0	101	3407	25	9	11	0	60000
75	27	49	336	15166	431	0	21930	170586	55	156	27209	2908	44	103	0	239000
76	48	20	1385	41578	148	0	68398	140307	23	91	39231	12724	43	3004	0	307000
77	58	425	1481	39827	100	158	44234	70983	0	78	79093	1809	10	744	0	239000
78	488	1708	366	257930	8370	111	119027	36942	0	3318	55531	1397	310	1502	0	487000
79	0	0	2289	315779	4043	0	70885	440145	0	0	28859	0	0	0	0	862000
80	4395	9350	0	586323	0	0	223607	2420379	0	0	56014	2932	0	0	0	3303000
81	15689	0	4303	338455	0	0	564765	674826	0	0	226962	0	0	0	0	1825000
82	0	0	3628	437003	0	0	1114939	177293	0	0	388137	0	0	0	0	2121000
83	0	0	4660	1084307	0	0	181247	583691	0	2052	102208	783	2052	0	0	1961000

Note: Age composition from 1957 through 1968, 1972 and 1974 through 1978 were based on Bristol Bay pooled catch and escapement (inshore) age compositions.

South Peninsula catch between 1956 and 1959 from South Unimak (statistical area 284) and Shumagin Islands (statistical area 282).

South Peninsula catch between 1960 and 1983 from South Unimak (statistical area 284) in June and early July and Shumagin Islands (statistical area 282) in June.

Appendix Table 3. Catch and escapement in Togiak and Kulukak sections of Togiak District.

Year	TOGIKAK					KULUKAK			
	CATCH Togiak	ESCAPEMENT			Total	CATCH Kulukak	ESCAPEMENT		
		Lake	River	Other		Other	Total	Kulukak	
1960	139,648								
1961	188,788					3,373	3,373		
1962	92,273					672	672		
1963	185,506					707	707		
1964	242,489					8,286	8,286		
1965	213,835	88,386		8,100	96,486	1,382	1,883	3,265	16,300
1966	190,479	91,098		13,100	104,198	7,263	2,057	9,320	18,800
1967	71,512	69,330		12,000	81,330	24,379	5,216	29,595	10,000
1968	65,475	42,918		7,000	49,918	2,618	4,606	7,224	6,500
1969	129,615	109,266		7,400	116,666	3,411	1,226	4,637	8,400
1970	152,748	192,096		10,800	202,896		629	629	10,000
1971	200,507	190,842		9,400	200,242	7,927	626	8,553	13,000
1972	51,354	74,070		4,500	78,570	17,244	6,663	23,907	3,400
1973	75,694	95,730		11,200	106,930	15,551	4,478	20,029	8,000
1974	110,932	82,992	12,000	8,600	103,592	13,615	14,840	28,455	4,900
1975	184,856	160,962	12,200	7,400	180,562	3,821	237	4,058	8,600
1976	293,016	158,190	15,000	16,200	189,390	4,822	4,045	8,867	11,200
1977	201,004	133,734	4,400	24,400	162,534	16,252	1,195	17,447	40,100
1978	422,100	273,576	15,000	17,600	306,176	29,668	248	29,916	33,900
1979	393,337	171,138	14,200	12,900	198,238	66,629	1,018	67,647	26,600
1980	591,470	461,850	27,900	37,000	526,750	42,811	280	43,091	45,700
1981	620,288	208,080	21,150	77,900	307,130	19,246	173	19,419	58,780
1982	581,718	244,824	3,450	40,400	288,674	13,952	26	13,978	52,750
1983	529,775	191,520	7,200	13,920	212,640	55,906	2,527	58,433	26,970

Note: Other escapement from Gechiak, Pungokepuk, Ongivinuck, Ungalikthluk/Kukayachagak, and other minor river systems.

Note: Other catch from Osviak, Matogak, Cape Peirce, and Ungalikthluk sections.

Appendix Table 4. Kvichak River sockeye salmon escapement and return by brood year including estimated intercept on catch (in thousands).

BROOD YEAR	RETURN BY AGE CLASS															TOTAL	
	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	274	0	0	0	0	274
1951	0	0	0	0	0	0	0	245	3717	0	0	983	0	1	0	0	4946
1952	0	0	0	0	10955	0	0	6681	2956	0	0	654	1	0	1	0	21249
1953	0	0	0	0	91	0	0	62	365	0	0	60	0	0	0	16	593
1954	0	0	0	0	81	17	0	29	643	0	0	0	0	0	29	0	799
1955	0	0	0	0	251	14	0	101	589	0	0	531	20	0	0	0	1504
1956	9443	0	14	0	24280	0	0	6960	6465	0	0	1308	0	0	0	0	39027
1957	2843	8	0	0	243	0	0	244	3333	0	2	259	0	0	2	0	4090
1958	535	0	0	0	76	0	0	48	135	0	0	26	0	0	3	0	289
1959	680	0	0	0	212	1	0	117	206	0	0	11	0	0	0	0	546
1960	14630	0	0	1	1314	134	0	563	46743	0	0	6483	10	0	6	0	55255
1961	3706	1	0	0	334	0	0	190	2293	0	0	679	5	0	0	0	3502
1962	2581	0	0	0	104	2	0	152	4673	0	0	408	12	0	4	0	5356
1963	339	0	0	1	49	3	0	50	639	0	0	366	3	0	9	0	1120
1964	957	0	8	0	2232	105	0	407	2341	0	0	647	8	0	3	0	5751
1965	24326	0	25	0	9853	484	0	471	32950	0	0	1238	2	0	1	0	45024
1966	3775	4	11	6	497	11	0	1086	4261	0	0	385	0	1	0	0	6261
1967	3216	0	0	5	349	2	0	272	812	0	0	86	0	0	0	0	1527
1968	2557	0	0	0	293	0	0	34	77	0	5	132	0	0	2	0	543
1969	8394	0	0	1	129	7	0	321	4221	0	0	594	19	0	11	0	5303
1970	13935	0	1	0	43	40	0	13	14462	6	0	849	412	0	7	0	15833
1971	2387	0	0	0	244	18	0	93	2170	0	0	303	2	0	0	0	2830
1972	1010	0	0	0	255	1	0	159	1206	0	22	297	0	0	0	0	1941
1973	227	0	0	2	576	2	2	1028	274	0	4	543	28	0	0	0	2457
1974	4434	0	9	1	6328	309	0	2009	16726	0	8	763	23	0	5	0	26180
1975	13140	0	5	0	5682	302	0	1232	30263	0	0	599	2	0	0	0	38086
1976	1965	0	5	11	5298	43	0	826	4115	0	4	273	0	0	0	0	10575
1977	1341	11	43	6	1933	2	0	933	207	0	0	96	0	0	0	0	3231
1978	4149	0	0	0	1835	16	0	1171	1297	0	0	839	11	0	3	0	5174
1979	11218	1	57	3	18396	76	0	2261	17608	0	0	3463	0	0	0	0*	41866*
1980	22505	0	2	5	2907	14	0	1574	8210	0	2	385	0	0*	0*	0*	13100*
1981	1754	0	0	10	812	0	0	223	912	0	0	0*	0*	0*	0*	0*	1957*
1982	1135	24	0	1	441	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	467*
1983	3570	0	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*

Note: Interception catch from Japanese mothership and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 5. Branch River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	-RETURN BY AGE CLASS-														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	290	0	0	0	0	290
1951	0	0	0	0	0	0	0	325	378	0	0	43	0	0	0	0	747
1952	0	0	0	0	422	0	0	295	131	0	0	115	0	0	1	0	963
1953	0	0	0	0	5	0	0	11	64	0	0	0	0	0	0	0	80
1954	0	0	0	0	14	3	0	109	392	0	0	141	0	0	1	0	661
1955	0	0	0	0	788	0	0	237	26	0	0	44	0	0	0	0	1095
1956	784	5	0	0	1885	0	0	458	0	0	0	38	3	0	0	0	2390
1957	127	0	0	0	5	0	0	23	43	0	0	13	0	0	1	0	85
1958	95	0	0	0	43	0	0	26	27	0	0	52	0	0	0	0	147
1959	825	0	0	0	301	0	0	265	122	0	0	76	1	0	2	0	767
1960	1241	0	0	0	105	0	0	185	135	0	0	31	0	0	0	0	456
1961	90	0	10	1	89	1	0	185	7	0	0	0	0	0	0	0	292
1962	91	0	19	0	129	0	0	92	3	0	0	19	1	0	0	0	262
1963	203	0	0	0	199	1	0	140	34	0	0	1	0	0	0	0	376
1964	249	0	5	0	100	2	0	98	113	0	0	17	0	0	0	0	336
1965	175	0	6	0	104	1	0	161	10	0	0	17	0	0	0	0	299
1966	174	0	13	0	282	0	0	262	12	0	0	11	0	0	0	0	581
1967	203	0	9	8	291	1	0	51	46	0	0	7	0	0	0	0	414
1968	194	3	5	0	127	0	0	40	2	0	0	3	0	0	0	0	180
1969	182	0	0	0	4	1	0	54	105	0	0	25	0	0	0	0	190
1970	177	0	0	0	73	0	0	71	6	0	0	2	0	0	0	0	153
1971	187	0	2	0	26	0	0	28	31	0	0	37	0	0	2	0	126
1972	151	0	1	0	91	0	0	17	7	0	0	14	0	0	0	0	130
1973	35	0	0	0	97	1	0	130	18	0	0	2	0	0	0	0	248
1974	215	0	4	0	292	5	0	18	128	0	0	8	0	0	0	0	456
1975	100	0	15	0	415	0	0	340	3	0	1	1	0	0	0	0	774
1976	82	0	26	0	211	0	0	168	20	0	0	55	0	0	0	0	481
1977	100	0	27	0	141	1	0	699	0	0	4	9	0	0	0	0	880
1978	229	0	1	0	102	0	0	69	39	0	0	143	0	0	0	0	354
1979	294	0	3	2	460	2	0	287	32	0	0	3	0	0	0	0*	790*
1980	298	0	0	0	102	0	0	203	13	0	2	9	0	0*	0*	0*	328*
1981	82	0	0	0	57	0	0	165	51	0	0	0*	0*	0*	0*	0*	273*
1982	239	0	0	0	171	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	172*
1983	96	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 6. Naknek River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	-----RETURN BY AGE CLASS-----															TOTAL	
	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	1211	0	2	5	0	1218
1951	0	0	0	0	0	0	0	1435	757	0	0	1250	0	1	0	0	3443
1952	0	0	0	0	87	0	0	1199	108	0	7	176	1	0	2	0	1579
1953	0	0	0	0	24	0	0	135	177	3	0	206	42	0	1	1	589
1954	0	0	0	0	85	19	0	302	2129	0	0	587	0	13	3	0	3138
1955	0	0	0	0	720	1	0	821	214	0	0	88	2	4	2	0	1852
1956	1773	0	1	0	474	0	0	1700	3	0	17	304	0	0	0	0	2499
1957	635	0	0	0	53	2	0	329	505	0	1	673	5	0	3	0	1569
1958	278	0	0	0	112	4	0	211	538	0	0	168	3	0	2	0	1039
1959	2232	0	0	0	349	7	0	351	742	0	0	704	0	0	0	0	2153
1960	828	0	1	1	1408	9	0	626	696	0	0	1278	1	1	2	0	4023
1961	351	0	0	0	239	3	0	745	315	0	3	639	0	0	8	0	1953
1962	723	0	0	0	76	4	0	230	351	0	2	397	13	0	1	0	1074
1963	905	0	0	0	136	8	0	390	833	0	0	627	7	0	1	0	2002
1964	1350	0	1	0	447	24	0	264	1135	0	0	177	11	0	1	0	2061
1965	718	0	5	0	540	44	0	361	732	0	0	437	1	0	1	0	2121
1966	1016	1	4	0	728	2	0	2305	167	0	1	629	0	1	0	0	3838
1967	756	0	0	2	326	6	0	625	401	0	0	356	0	1	0	0	1717
1968	1023	0	3	0	152	0	0	234	83	0	0	269	2	0	2	0	745
1969	1331	0	0	0	47	3	0	308	976	0	0	1209	5	0	3	0	2550
1970	733	0	1	0	154	19	0	318	1845	0	0	370	12	0	0	0	2719
1971	936	0	1	0	398	24	0	559	1428	0	0	1844	3	9	8	0	4274
1972	587	0	3	0	245	3	0	241	161	0	3	598	9	0	1	0	1264
1973	357	0	0	0	494	0	0	618	524	0	0	598	0	0	0	0	2235
1974	1241	0	2	0	232	3	0	228	1026	0	1	783	5	0	5	0	2285
1975	2027	0	1	0	425	11	0	1746	1393	0	0	1640	1	8	0	0	5226
1976	1321	0	4	0	1084	3	0	4049	1575	0	21	1492	0	27	1	0	8256
1977	1086	2	10	7	635	0	0	2268	95	0	66	387	0	1	5	0	3475
1978	813	0	1	0	331	4	0	1716	1103	0	11	516	1	0	0	0	3684
1979	925	0	4	1	2447	4	0	949	787	0	8	403	4	0	2	0*	4608*
1980	2645	0	1	1	707	13	0	1440	1211	0	9	772	0	0*	0*	0*	4155*
1981	1796	0	4	0	803	9	0	2480	463	0	0	0*	0*	0*	0*	0*	3759*
1982	1156	0	4	2	184	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	190*
1983	888	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 7. Egegik River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR ESCAPEMENT	-----RETURN BY AGE CLASS-----															TOTAL	
	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)		
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	15	
1950	0	0	0	0	0	0	0	0	0	0	0	304	77	4	23	0	407
1951	0	0	0	0	0	0	0	360	1120	0	1	1301	2	0	6	0	2791
1952	0	0	0	0	685	0	0	446	241	0	1	295	19	2	5	0	1695
1953	0	0	0	0	26	0	0	39	435	2	0	337	254	0	12	0	1104
1954	0	0	0	0	11	4	0	13	1190	0	0	641	87	0	45	0	1991
1955	0	0	1	0	20	0	0	163	672	0	0	396	6	1	6	0	1265
1956	1104	0	6	0	2025	0	0	3186	924	0	2	685	1	0	12	0	6841
1957	391	0	0	0	37	0	0	43	1096	0	0	926	70	0	62	0	2235
1958	246	0	0	0	42	2	0	73	817	0	0	308	16	0	3	0	1262
1959	1072	0	0	0	73	2	0	164	1037	0	0	467	14	0	24	0	1782
1960	1799	8	0	0	447	21	0	328	4447	0	1	2559	49	0	50	0	7912
1961	702	0	0	3	82	0	0	230	446	0	1	790	28	0	10	0	1590
1962	1027	0	0	0	22	0	0	69	950	0	0	375	28	0	30	0	1475
1963	998	0	0	1	16	2	0	112	538	1	1	506	74	0	7	0	1258
1964	850	0	1	0	126	6	0	69	1454	1	0	242	73	0	12	0	1983
1965	1445	0	0	0	104	35	0	72	2016	0	4	844	6	2	20	0	3102
1966	804	0	0	1	249	0	0	752	600	0	2	889	7	0	10	0	2511
1967	637	0	0	2	60	2	0	257	665	0	0	622	1	1	2	0	1613
1968	339	0	0	0	41	0	0	56	87	0	0	258	3	5	9	0	458
1969	1016	0	0	0	12	1	0	111	1096	0	0	1139	279	2	113	0	2754
1970	920	0	0	0	59	0	0	89	796	0	1	175	95	0	25	0	1240
1971	634	0	0	0	45	2	0	109	1477	0	0	970	74	1	55	0	2732
1972	546	0	0	1	57	2	0	61	1508	0	0	1263	48	0	18	0	2958
1973	329	0	0	0	76	0	0	135	578	0	0	851	35	0	4	0	1679
1974	1276	0	0	0	131	18	0	99	2225	0	0	496	54	0	3	0	3025
1975	1174	0	0	0	148	9	0	241	2449	2	0	797	14	2	1	0	3663
1976	509	1	1	2	612	59	0	789	3003	0	4	846	0	0	0	0	5317
1977	693	0	2	0	823	1	0	1965	684	0	14	632	54	0	13	0	4188
1978	896	0	0	2	398	6	0	516	5975	0	0	2237	26	4	5	0	9169
1979	1032	0	3	0	714	10	3	533	3087	0	4	1626	0	0	0	0*	5980*
1980	1061	0	1	13	807	28	0	2161	4598	0	6	876	7	0*	0*	0*	8498*
1981	695	0	0	6	546	62	0	948	3299	0	0	0*	0*	0*	0*	0*	4861*
1982	1035	2	2	4	1005	12	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1024*
1983	792	0	3	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	3*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 8. Ugashik River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
1950	0	0	0	0	0	0	0	0	0	0	1	50	0	0	3	0	54
1951	0	0	0	0	0	0	1	52	191	0	2	118	1	0	0	0	364
1952	0	0	0	1	559	0	0	391	209	0	0	78	2	0	0	0	1240
1953	0	0	0	0	216	0	0	249	420	0	0	216	7	0	0	0	1108
1954	0	0	0	0	24	3	0	28	395	0	0	61	0	0	0	0	511
1955	0	0	0	1	17	1	0	33	118	0	0	7	0	0	0	0	177
1956	425	1	12	0	3166	0	0	836	80	0	2	35	0	0	0	0	4132
1957	215	0	0	3	35	0	0	105	354	0	2	100	4	0	2	0	604
1958	280	0	0	0	63	0	0	105	444	0	0	66	0	0	0	0	679
1959	219	0	0	0	18	0	0	38	310	0	0	132	0	0	1	0	497
1960	2304	0	0	0	674	11	0	296	1563	0	0	487	0	0	0	0	3032
1961	349	0	0	3	240	2	0	500	247	0	1	119	0	0	0	0	1113
1962	255	0	0	2	77	2	0	130	185	0	0	27	0	0	0	0	424
1963	388	0	0	0	13	0	0	21	91	0	0	23	0	0	0	0	148
1964	473	0	0	0	31	9	0	16	245	0	0	18	0	0	2	0	324
1965	997	0	0	0	86	2	0	38	249	0	1	162	1	0	0	0	538
1966	704	1	0	2	724	0	0	1478	90	0	0	21	0	0	0	0	2316
1967	239	0	0	0	56	0	0	50	44	0	0	34	0	0	0	0	184
1968	71	0	0	0	14	0	0	7	15	0	0	3	0	0	0	0	40
1969	160	0	0	0	4	0	0	5	53	0	0	26	2	0	2	0	92
1970	735	0	0	0	4	1	0	2	256	0	1	27	2	0	1	0	294
1971	530	0	0	0	178	0	0	229	282	0	0	130	0	0	1	0	821
1972	79	0	0	0	34	0	0	58	119	0	0	36	2	0	3	0	252
1973	39	0	0	1	16	0	0	7	15	0	0	46	4	0	0	0	89
1974	62	0	0	0	11	9	0	15	600	0	0	82	2	0	0	0	719
1975	429	0	3	0	1479	4	0	573	1715	0	0	325	2	1	0	0	4103
1976	342	0	0	2	2020	58	0	1526	1248	0	7	431	0	0	3	0	5296
1977	201	0	2	18	585	0	0	1592	262	0	10	179	7	1	5	0	2660
1978	70	0	0	6	244	7	0	418	849	0	6	525	1	0	0	0	2055
1979	1701	0	19	0	3086	8	0	859	1436	0	13	549	0	5	0	0*	5975*
1980	3321	0	1	14	1180	39	0	2216	3361	0	10	781	2	0*	0*	0*	7605*
1981	1327	0	2	9	1590	4	0	2505	2198	0	0	0*	0*	0*	0*	0*	6308*
1982	1158	0	1	14	414	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	429*
1983	1001	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 9. Wood River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

-----RETURN BY AGE CLASS-----																	
BROOD YEAR	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)	TOTAL
1950	0	0	0	0	0	0	0	0	0	0	1	64	0	0	0	0	64
1951	0	0	0	0	0	0	0	505	319	0	3	54	0	0	1	0	881
1952	0	0	0	0	759	0	0	558	29	0	2	34	0	0	0	0	1383
1953	0	0	0	0	301	0	0	331	139	0	2	34	0	0	1	0	809
1954	0	0	0	0	1237	0	0	140	1085	0	1	67	0	0	0	0	2529
1955	0	0	0	0	2407	0	0	834	401	0	5	143	0	0	0	0	3790
1956	773	0	0	48	774	0	0	626	24	0	0	0	0	0	0	0	1472
1957	289	0	0	40	136	0	0	257	35	0	0	0	0	0	0	0	469
1958	960	0	1	0	2145	1	0	388	75	0	0	32	0	0	0	0	2642
1959	2209	0	0	1	978	10	0	398	359	0	1	55	0	0	2	0	1803
1960	1016	0	6	0	1473	0	0	1040	106	0	2	105	1	0	0	0	2733
1961	461	0	0	10	255	0	0	1184	24	0	2	20	0	1	1	0	1497
1962	874	1	2	0	992	1	2	341	116	0	6	43	0	0	0	0	1504
1963	721	0	0	0	536	1	0	769	76	0	0	46	0	0	0	0	1427
1964	1076	0	1	6	452	0	0	347	338	0	0	74	0	0	2	0	1219
1965	675	2	1	8	472	1	0	1000	90	0	0	213	0	0	1	0	1787
1966	1209	0	7	29	975	0	0	988	46	0	7	69	0	0	1	0	2122
1967	516	0	3	21	642	0	0	269	75	0	2	80	0	0	0	0	1091
1968	649	0	1	0	514	0	0	565	5	0	4	19	0	0	0	0	1109
1969	604	0	0	4	57	0	0	445	201	0	10	116	0	0	0	0	834
1970	1162	0	2	0	1539	0	0	1004	231	0	0	26	0	0	0	0	2801
1971	851	3	0	19	456	0	0	576	198	0	1	49	0	0	0	0	1302
1972	431	2	1	22	779	0	0	631	32	0	19	27	0	0	0	0	1514
1973	330	1	1	0	213	0	0	1149	74	0	3	44	0	0	0	0	1485
1974	1709	0	3	6	2956	4	0	1698	421	0	5	71	0	0	0	0	5164
1975	1270	13	47	13	1591	2	0	1977	406	0	2	734	0	0	0	0	4785
1976	817	0	3	0	2278	3	0	2590	572	0	24	293	0	0	0	0	5763
1977	562	0	20	0	1028	0	0	2351	90	0	0	26	0	0	0	0	3516
1978	2267	0	0	0	1361	3	0	1197	607	0	5	123	0	0	0	0	3296
1979	1706	0	10	0	2784	0	0	1723	28	0	2	18	0	0	0	0*	4565*
1980	2969	2	1	0	493	0	0	1064	87	0	1	95	0	0*	0*	0*	1743*
1981	1233	0	0	0	639	0	0	1144	83	0	0	0*	0*	0*	0*	0*	1866*
1982	976	0	3	0	498	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	502*
1983	1361	0	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 10. Igushik River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR ESCAPEMENT	-----RETURN BY AGE CLASS-----															TOTAL	
	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)	8(4)		
1950	0	0	0	0	0	0	0	0	0	0	1	86	0	0	0	0	87
1951	0	0	0	0	0	0	0	681	68	0	1	29	0	0	2	0	782
1952	0	0	0	0	162	0	0	303	9	0	5	73	0	0	0	0	553
1953	0	0	0	0	98	0	0	1	20	0	3	65	0	0	1	0	187
1954	0	0	0	0	175	0	0	269	204	0	0	113	0	1	0	0	763
1955	0	0	0	0	454	0	0	783	113	0	0	94	0	0	0	0	1444
1956	400	0	0	0	169	0	0	522	12	0	3	36	0	0	0	0	742
1957	130	0	0	0	2	0	0	35	19	0	0	20	0	0	0	0	76
1958	107	0	0	1	14	0	0	71	20	0	0	28	0	0	0	0	133
1959	644	0	0	0	101	0	0	155	93	0	0	22	0	0	0	0	372
1960	495	0	0	1	61	0	0	310	44	0	0	57	0	0	0	0	474
1961	294	0	0	1	33	0	1	365	20	0	0	17	0	0	0	0	438
1962	16	0	0	8	20	0	0	281	9	0	0	9	0	0	0	0	327
1963	92	0	0	3	254	0	0	190	36	0	0	25	0	0	0	0	508
1964	129	0	0	1	162	0	0	586	133	0	0	49	0	0	0	0	931
1965	181	0	0	0	371	0	0	436	203	0	0	79	0	0	0	0	1089
1966	206	0	0	0	66	0	0	384	6	0	0	15	0	0	0	0	471
1967	282	0	0	3	57	0	0	91	13	0	0	12	0	0	0	0	175
1968	195	0	0	0	43	0	0	120	0	0	2	10	0	0	0	0	176
1969	512	0	0	0	1	0	0	131	301	0	2	103	0	0	0	0	536
1970	371	0	0	1	26	0	0	171	41	0	0	71	0	0	0	0	309
1971	211	0	0	1	48	0	0	164	60	0	0	30	0	0	0	0	303
1972	60	0	0	4	89	0	0	109	6	0	8	13	0	0	0	0	229
1973	60	0	0	0	19	0	0	651	25	0	2	29	0	0	0	0	726
1974	359	0	0	7	441	1	0	750	346	0	4	25	0	0	0	0	1574
1975	241	0	0	0	783	0	0	2556	137	0	2	503	0	0	0	0	3980
1976	186	0	0	0	551	3	0	1411	194	0	38	210	0	0	0	0	2406
1977	96	0	0	6	294	0	0	1722	14	0	10	6	0	0	0	0	2051
1978	536	0	0	0	62	0	0	385	65	0	1	15	0	0	0	0	528
1979	860	0	0	4	453	0	0	424	15	0	0	4	0	0	0	0*	901*
1980	1988	0	0	0	15	0	0	243	20	0	1	55	0	0*	0*	0*	334*
1981	591	0	0	0	144	0	0	826	4	0	0	0*	0*	0*	0*	0*	974*
1982	424	0	0	0	53	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	53*
1983	180	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 11. Nuyakuk River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
1951	0	0	0	0	0	0	0	61	3	0	1	14	0	0	1	0	80
1952	0	0	0	0	7	0	0	150	5	0	3	43	0	0	0	0	208
1953	0	0	0	0	55	0	0	427	6	0	0	1	0	0	0	0	489
1954	0	0	0	0	53	0	0	4	23	0	0	0	0	0	0	0	80
1955	0	0	0	0	52	0	0	10	10	0	0	0	0	0	0	0	72
1956	30	0	0	0	217	0	0	162	0	0	0	0	0	0	0	0	379
1957	67	0	0	0	4	0	0	11	2	0	0	1	0	0	0	0	18
1958	196	0	0	0	93	0	0	307	31	0	0	11	0	0	0	0	443
1959	49	0	0	60	11	0	0	57	3	0	0	9	0	0	0	0	140
1960	146	5	0	8	147	0	0	380	23	0	0	12	0	0	0	0	575
1961	80	1	0	37	37	0	0	317	2	0	0	0	0	0	0	0	394
1962	38	0	0	4	17	0	0	36	0	0	0	2	0	0	0	0	59
1963	167	0	0	26	4	0	0	194	2	0	0	6	0	0	0	0	232
1964	103	2	0	1	17	0	0	51	14	0	0	2	0	0	0	0	86
1965	203	0	0	7	72	0	0	603	36	0	7	54	0	0	0	0	779
1966	161	1	0	2	121	0	0	527	4	0	2	5	0	0	0	0	663
1967	20	0	1	2	9	0	0	64	0	0	0	6	0	0	0	0	83
1968	97	0	0	8	12	0	0	210	0	0	1	6	0	0	0	0	238
1969	70	2	0	23	5	0	1	81	13	0	4	6	0	0	0	0	134
1970	365	0	0	1	98	0	0	717	160	0	1	92	0	0	0	0	1070
1971	224	1	0	17	87	0	0	785	28	0	0	41	0	1	0	0	959
1972	29	0	0	11	49	0	0	295	14	0	47	120	0	0	0	0	535
1973	110	0	0	4	47	0	3	1100	2	0	1	1	0	0	0	0	1156
1974	155	0	0	0	117	0	0	249	7	0	0	0	0	0	0	0	373
1975	670	7	0	3	528	0	0	4494	127	0	4	243	0	1	0	0	5406
1976	425	2	1	35	397	0	0	2941	58	0	41	270	0	0	0	0	3745
1977	233	0	0	17	325	0	1	2114	15	0	195	24	0	0	0	0	2690
1978	577	0	0	0	123	0	0	1184	8	0	4	12	0	0	0	0	1331
1979	360	0	1	0	423	0	0	1027	11	0	3	2	0	0	0	0*	1467*
1980	3027	0	0	0	125	0	0	491	81	0	15	124	0	0*	0*	0*	837*
1981	834	0	0	0	258	0	0	1701	5	0	0	0*	0*	0*	0*	0*	1964*
1982	538	1	1	1	98	1	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	101*
1983	319	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 12. Snake River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	RETURN BY AGE CLASS														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1951	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	0	5
1952	0	0	0	0	4	0	0	6	0	0	0	0	0	0	0	0	10
1953	0	0	0	0	3	0	0	3	1	0	0	2	0	0	0	0	10
1954	0	0	0	0	12	0	0	9	69	0	0	0	0	0	0	0	90
1955	0	0	0	0	153	0	0	0	0	0	0	0	0	0	0	0	153
1958	9	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	3
1959	140	0	0	0	68	0	0	7	6	0	0	1	0	0	0	0	83
1960	17	0	0	0	14	0	0	18	1	0	0	0	0	0	0	0	33
1961	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
1971	9	0	0	0	0	0	0	2	17	1	0	3	0	0	0	0	24
1972	2	0	0	0	6	0	0	1	0	0	0	0	0	0	0	0	8
1973	1	0	0	0	8	0	0	3	5	0	0	1	0	0	0	0	16
1974	15	0	0	0	26	0	0	7	1	0	0	0	0	0	0	0	34
1975	10	0	0	0	10	0	0	0	0	0	0	12	0	0	0	0	23
1976	13	0	0	0	0	0	0	22	6	0	0	0	0	0	0	0	28
1977	9	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	16

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 13. Nushagak-Mulchatna River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	--RETURN BY AGE CLASS--														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1951	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	16
1952	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	24
1953	0	0	0	37	0	0	2	0	0	0	0	0	0	0	0	0	39
1954	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
1955	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	33
1962	9	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1963	46	0	0	0	0	0	1	53	0	0	0	2	0	0	0	0	56
1964	19	0	0	13	4	0	0	12	2	0	0	0	0	0	0	0	32
1965	28	1	0	13	16	0	0	91	0	0	0	0	0	0	0	0	120
1966	50	2	0	29	0	0	0	0	0	0	0	0	0	0	0	0	31
1967	47	1	0	0	0	0	0	0	0	0	4	3	0	0	0	0	8
1968	32	0	0	0	0	0	8	79	0	0	5	4	0	0	0	0	95
1969	17	0	0	90	0	0	5	2	2	0	0	0	0	0	0	0	100
1970	45	1	0	9	10	1	0	0	0	0	1	6	0	0	0	0	26
1971	58	0	0	0	0	0	0	78	2	0	0	125	0	0	0	0	206
1972	7	0	0	20	7	0	7	291	27	0	0	0	0	0	0	0	351
1973	80	0	0	51	44	0	0	0	0	0	0	0	0	0	0	0	96
1974	30	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 14. Togiak River sockeye salmon escapement and return by brood year including estimated interception catch (in thousands).

BROOD YEAR	ESCAPEMENT	-----RETURN BY AGE CLASS-----														TOTAL	
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	5(4)	6(2)	6(3)	6(4)	7(3)	7(4)		8(4)
1950	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31
1951	0	0	0	0	0	0	0	109	58	0	0	9	0	0	0	0	176
1952	0	0	0	0	168	0	0	58	9	0	0	6	0	0	0	0	241
1953	0	0	0	1	31	0	0	84	8	0	0	16	0	2	0	0	143
1954	0	0	0	0	20	0	0	146	12	0	0	0	17	0	0	0	194
1955	0	0	0	0	136	0	0	0	186	8	1	38	0	0	0	0	369
1956	225	0	0	0	4	104	0	306	22	0	1	13	0	0	0	0	450
1957	25	0	2	9	48	0	0	69	20	0	0	36	1	0	0	0	187
1958	72	0	1	3	68	0	0	115	59	0	0	25	0	0	0	0	271
1959	210	0	0	0	141	0	0	92	55	0	0	7	0	0	0	0	296
1960	163	0	0	3	191	0	0	276	22	0	0	52	0	0	0	0	545
1961	122	1	0	3	85	0	0	216	15	0	1	19	0	0	0	0	340
1962	62	0	0	7	48	0	0	103	4	0	0	8	0	0	0	0	170
1963	116	0	0	2	43	0	0	66	19	0	0	24	0	0	0	0	153
1964	105	0	0	1	43	0	0	84	41	0	0	6	0	0	0	0	175
1965	96	0	0	2	154	0	0	181	31	0	0	37	0	0	0	0	406
1966	104	1	0	6	200	0	0	420	4	0	1	9	0	0	0	0	642
1967	81	1	0	6	18	0	0	99	16	0	1	40	0	0	0	0	181
1968	50	0	0	1	49	0	0	190	6	0	3	13	0	0	0	0	263
1969	117	0	0	5	28	0	0	142	25	0	3	12	0	0	0	0	216
1970	203	0	0	1	54	0	0	226	55	0	1	70	0	0	0	0	409
1971	200	0	0	4	106	0	0	317	62	0	1	68	0	2	0	0	561
1972	79	0	0	2	93	0	0	150	21	0	46	56	0	0	0	0	369
1973	107	1	0	10	151	0	0	378	32	0	1	14	0	0	0	0	586
1974	104	0	0	1	256	0	0	321	22	0	3	45	0	1	0	0	650
1975	181	0	0	4	253	0	0	849	87	0	2	56	0	0	0	0	1251
1976	189	0	0	1	189	0	0	541	142	0	4	162	0	0	0	0	1039
1977	163	0	0	3	253	0	0	637	13	0	3	12	0	0	0	0	921
1978	306	0	1	8	146	0	0	440	65	0	0	19	0	0	0	0	679
1979	198	2	0	1	267	0	0	309	10	0	0	5	0	0	0	0*	594*
1980	527	0	0	0	43	0	0	223	10	0	1	10	0	0*	0*	0*	287*
1981	307	0	0	0	52	0	0	283	6	0	0	0*	0*	0*	0*	0*	342*
1982	289	0	0	0	95	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	96*
1983	212	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: Interception catch from Japanese mothership fishery and South Peninsula June sockeye fishery.

\* denotes incomplete returns from brood year escapement.

Appendix Table 15. Nushagak River chinook salmon escapement and return by brood year.

BROOD YEAR	ESCAPEMENT	-RETURN BY AGE CLASS-															TOTAL
		3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	6(1)	6(2)	6(3)	7(2)	7(3)	8(2)	8(3)	
1959	0	0	0	0	0	0	0	0	0	0	0	0	1834	408	165	0	2407
1960	0	0	0	0	0	0	0	0	0	0	48903	0	8082	329	155	0	57469
1961	0	0	0	0	0	0	0	33724	0	329	70595	495	13777	309	0	0	119229
1962	0	0	0	306	16709	0	3464	43710	0	619	76164	155	7006	983	145	0	149261
1963	0	0	0	2144	35627	0	3096	48607	0	123	65137	246	3323	145	0	127	158575
1964	0	0	0	1857	9288	0	2458	31586	0	289	33223	289	890	255	75	0	80210
1965	0	0	774	861	14257	0	1734	83921	0	0	83677	0	3452	225	0	0	188901
1966	40000	123	123	7367	14011	0	4705	27468	0	0	37974	150	5045	360	986	329	98641
1967	65000	0	0	255	9792	0	1576	16660	75	216	46232	255	24453	329	295	0	100138
1968	70000	0	0	825	13808	0	360	18305	0	0	67656	0	8378	592	0	0	109924
1969	35000	225	0	360	937	0	0	14474	0	0	29468	789	2347	335	0	0	48935
1970	50000	0	0	0	1426	0	0	56568	0	0	73569	1340	4192	621	0	766	138482
1971	40000	0	0	0	2464	0	335	55806	503	0	92234	931	12502	6634	0	0	171409
1972	25000	0	0	168	33181	0	621	53570	0	0	125787	2807	7314	7575	0	0	231023
1973	35000	0	0	0	3105	0	0	81903	0	0	105273	0	12810	0	0	0	203091
1974	70000	0	0	510	23729	0	0	42057	2090	0	51024	0	0	0	0	0	119410
1975	70000	0	510	0	95345	0	0	145691	0	0	156803	0	6249	6892	0	0	411490
1976	100000	0	1567	0	7599	0	0	110474	0	0	148084	8612	4477	1691	0	0	282504
1977	65000	0	0	0	89092	0	0	151680	3934	0	209898	0	15031	0	68	0	469703
1978	130000	0	0	0	26685	0	0	47454	1394	0	60787	0	22571	0	30	95	159016
1979	95000	0	2251	0	48284	0	0	70045	0	0	85582	0	10197	875	0*	0*	217234*
1980	141000	0	0	0	10291	0	0	49073	0	0	53874	872	0*	0*	0*	0*	114110*
1981	150000	0	1200	0	33765	68	0	47442	185	0*	0*	0*	0*	0*	0*	0*	82660*
1982	147000	0	1216	0	3455	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4671*
1983	162000	0	139	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	139*

Note: 1965-1981 escapement and subsistence catch apportioned with commercial catch age composition.

\* denotes incomplete returns from brood year escapement.

Appendix Table 16. Togiak River chinook salmon escapement and return by brood year.

-----RETURN BY AGE CLASS-----																	
BROOD YEAR	ESCAPEMENT	3(1)	3(2)	4(1)	4(2)	4(3)	5(1)	5(2)	5(3)	6(1)	6(2)	6(3)	7(2)	7(3)	8(2)	8(3)	TOTAL
1960	0	0	0	0	0	0	0	0	0	0	0	0	1497	819	177	14	2507
1961	0	0	0	0	0	0	0	0	0	0	17349	47	5222	0	0	0	22618
1962	0	0	0	0	0	0	0	2222	0	295	7759	0	1370	0	0	0	11646
1963	0	0	0	10	1427	0	59	5340	0	0	13302	0	655	0	0	0	20793
1964	0	0	0	266	10384	0	592	10852	85	0	16680	0	2352	95	68	0	41374
1965	0	0	0	226	1777	0	830	12183	0	330	22385	236	1461	272	0	0	39700
1966	0	0	0	1136	12183	0	1882	17071	0	136	27385	0	2142	0	405	325	62665
1967	10000	0	0	2211	471	0	816	2821	0	0	13223	88	7668	82	0	0	27380
1968	16000	0	0	68	918	0	88	5989	0	0	14364	66	0	0	0	0	21493
1969	8000	0	0	44	285	0	82	1378	78	0	2112	0	74	0	0	0	4053
1970	15000	0	0	0	2565	0	0	8752	0	0	12168	0	1336	0	0	0	24821
1971	20000	0	0	0	7859	0	0	15972	177	0	20877	724	1946	7590	0	101	55246
1972	13986	305	0	0	15885	0	223	29312	0	0	72876	1849	7986	251	0	0	128687
1973	11000	0	0	0	3113	0	0	9633	0	0	20140	0	1018	2036	0	0	35940
1974	15000	0	0	0	3309	0	0	4470	0	0	7125	0	568	0	0	0	15472
1975	11000	0	97	0	17177	0	0	10178	0	0	16728	257	1741	1024	0	0	47202
1976	14000	0	101	0	5089	0	0	13854	770	0	13156	1997	1830	0	0	0	36797
1977	20000	0	0	0	19088	0	0	27334	356	0	36210	0	5148	0	0	0	88136
1978	40000	0	0	102	4763	0	0	7572	0	0	18205	0	5599	0	39	229	36509
1979	20000	0	718	0	15448	0	0	21778	0	0	29681	0	2909	229	0*	0*	70763*
1980	12000	0	0	0	3450	0	0	6597	0	0	4820	726	0*	0*	0*	0*	15593*
1981	27000	0	0	0	10418	0	0	12741	0	0*	0*	0*	0*	0*	0*	0*	23159*
1982	17000	0	106	0	3902	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4008*
1983	22000	0	0	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*

Note: 1965-1981 escapement and subsistence catch apportioned with commercial catch age composition.

\* denotes incomplete returns from brood year escapement.

Appendix Table 17. Nushagak River escapement of sockeye salmon age composition, 1977.

	3(1)	4(1)	4(2)	5(1)	5(2)	5(3)	6(3)	TOTAL
PERCENT	.5	8.4	10.6	1.9	49.3	6.2	23.1	
SAMP SIZE	2	35	44	8	205	26	96	416

Note: Based on otolith samples taken in 1977, but not previously reported.

The other years when age composition samples were available for the Nushagak-Mulchatna River systems were: 1968, 1969, 1970, 1973, 1974, 1976, and 1977.

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